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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY,
(INCORPORATED.)

Vol. XIII.

CHICAGO, ILLINOIS, FEBRUARY 15, 1895.

No. 8.

SUBSCRIPTION PRICE,
ONE DOLLAR PER ANNUM.

Excelsior Grain-Cleaning Machinery

CONSISTING OF THE

EXCELSIOR Dustless Warehouse and Elevator Separator,
EXCELSIOR Oat Clipper, EXCELSIOR Separator and Grader,
EXCELSIOR "Combined Grain Machine."

ALSO

PEASE DUSTLESS SEPARATORS and WAREHOUSE FANNING MILLS,
POWER CAR PULLERS, GASOLINE ENGINES, STEAM ENGINES, HORSE POWERS,
POWER TRANSMISSION MACHINERY,
GENERAL MILL AND ELEVATOR SUPPLIES.

E. H. PEASE MFG. CO., RACINE, WISCONSIN.

Headquarters for
SHAFTING, HANGERS, PULLEYS,
GEARS, SPROCKET WHEELS,
"Sweep" and "Tread" Horse Powers,
Elevator "Boots," "Heads," "Buckets,"
FEED GRINDERS,
Special Flax Mills; Single, Double and
Quadruple Flax Reels.
..... **BELTING**
"Platform," "Hopper" and "Dump"
Scales, Flexible Loading Spouts.
Corn Shellers, all kinds of FITTINGS,
SUPPLIES and MACHINERY for
Elevators and Mills.
Elevator Equipments a Specialty.

ADDRESS

GALDWELL
CONVEYOR
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HORSE POWERS
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WIRE ROPE
—
BELT TIGHTENERS

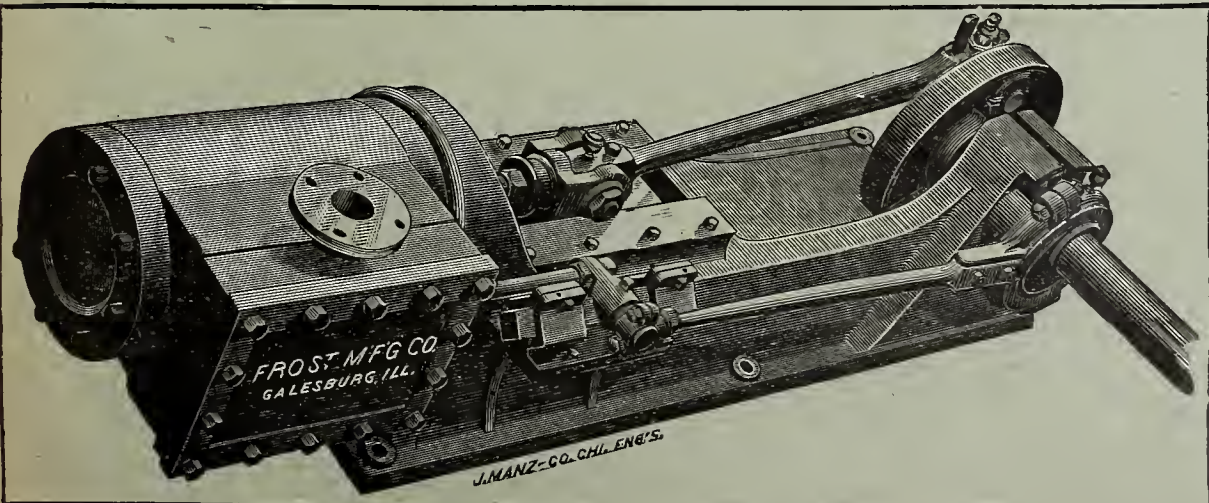
MILL AND ELEVATOR MACHINERY
ELEVATOR BOOTS
ELEVATOR BUCKETS
ELEVATOR BOLTS
BELTING AND ROPE TRANSMISSION
SHEAVE WHEELS
SHAFTING, HANGERS
SPROCKET WHEELS



SEND FOR CATALOGUE

**THORNBURGH
MFG. CO.**

110 Jefferson Street
CHICAGO, ILL.



FOR PRICES AND DISCOUNTS
— ON —
Elevator Machinery
AND SUPPLIES
— OF —
EVERY DESCRIPTION,
ADDRESS EITHER STEAM OR HORSE-POWER,
The FROST MFG. CO.,
GALESBURG, ILL.

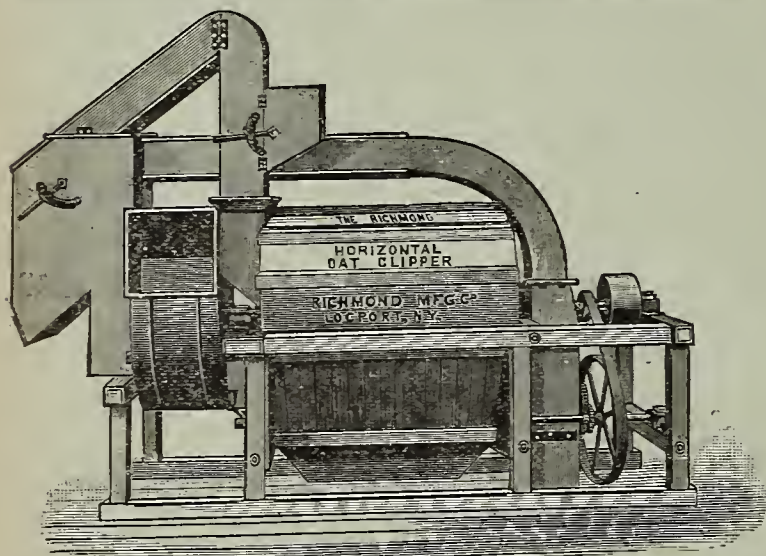
NOTICE.

Important Decision Affecting Elevator Owners and Builders.

The Hon. Judge Grosscup of the Circuit Court of the United States for the Northern District of Illinois, on May 9, 1894, sustained the validity of the dust collector patents known as the "CYCLONE," and ordered a permanent writ of injunction against the defendants.

Infringing machines involved in these suits were built by the Vortex Dust Collector Co. of Milwaukee, and the Huyett & Smith Mfg. Co. of Detroit, Mich., who themselves assumed and conducted the defense, through their own attorneys. IF YOU HAVE USED, OR ARE USING INFRINGING MACHINES, YOU CAN SAVE MONEY BY PROCURING A LICENSE AT ONCE AND THUS AVOID LAW SUITS. We must and will call a halt on pirates and users of piratical machinery, and we warn the trade thus frankly and publicly against the manufacture, sale or use of infringing machines, and it will be our duty to prosecute such infringements of our rights to the fullest degree and in the promptest manner.

The Knickerbocker Co., - Jackson, Mich.



The Richmond Horizontal Adjustable Oat Clipper with Revolving Case.

A Wonderful Machine.

WEST JEFFERSON STEAM FLOURING MILLS,
WEST JEFFERSON, OHIO, April 11, 1894.

RICHMOND MFG. CO., Lockport, N. Y.

GENTLEMEN:—Inclosed find check, covering bill of March 10, in full. The No. 0 Horizontal Adjustable Scourer and Polisher with Revolving Scouring Case is a wonderful machine, and we are more than pleased with its work. We have cleaned all kinds of wheat and must say that it cleans beyond our expectations.

Yours very truly, JOHN RENNER.

The Richmond Grain Cleaning Machinery and Dusters.

RICHMOND MANUFACTURING CO.,

Write for Catalogue.

LOCKPORT, N. Y., U. S. A.

Link-Belt Machinery Co.,

ENGINEERS, FOUNDERS MACHINISTS,
CHICAGO, ILL., U. S. A.



MANUFACTURE

Shafting, Shaft Bearings, Pulleys, Gearing,
Friction Clutches, Etc.
Manilla Rope Power Transmissions.
Standard Water Tube Safety Boilers.
Original Ewart Detachable Link Belting.
The Clark Power Grain Shovel.
Belt Conveyors and Trippers.
Savage & Love Patent Controllable Wagon
Dump.

NEBRASKA CITY, NEB., May 16, 1894.

CHICAGO AUTOMATIC SCALE CO., CHICAGO, ILL.:

Gentlemen:—Please ship to our address at Hamburg, Iowa, an Automatic Scale, same as we ordered of you some time ago. This Scale is doing good work and we want another for our mill at Hamburg. Send the invoice and notice of shipment to us here. Execute the order as promptly as possible.

Yours truly,

THEO. BEYSCHLAG, Mgr.



Porter Iron Roofing and Corrugating Co.,

19 Race Street, CINCINNATI, OHIO.

Manufacturers of all kinds of IRON and STEEL ROOFING and SIDING.

The Pioneers of the Metal Roofing Business in the United States. We guarantee satisfaction. We ship promptly. Give us a trial order, and we will sell you more.
When writing for our prices and Illustrated Catalogue, please mention the ELEVATOR AND GRAIN TRADE.

GRAIN ELEVATOR MACHINERY AND SUPPLIES

OUR SPECIALTY

Is to Furnish Every Description of

MACHINERY OR SUPPLIES

Required for the Equipment or Repairing of

GRAIN ELEVATORS

Such as:

**"SWEEP" and "TREAD" HORSE POWERS,
GAS ENGINES, OIL ENGINES, STEAM ENGINES.**

SHAFTING, PULLEYS, HANGERS,
PILLOW-BLOCKS, CLUTCHES, COUPLINGS,
GEARS, SPROCKETS, SET COLLARS,
TAKE-UP BOXES, CRANE SPOUTS.
LEATHER, RUBBER, COTTON AND LINK BELTING.
"FLEXIBLE" AND "SWIVEL" GRAIN SPOUTS.
ELEVATOR BOOTS, BUCKETS AND BOLTS.
"SPIRAL" AND "BELT" CONVEYORS.
"PLATFORM," "DUMP" AND "HOPPER" SCALES.
GRAIN SCOOPS, AND POWER GRAIN SHOVELS.

—ALL SIZES OF—

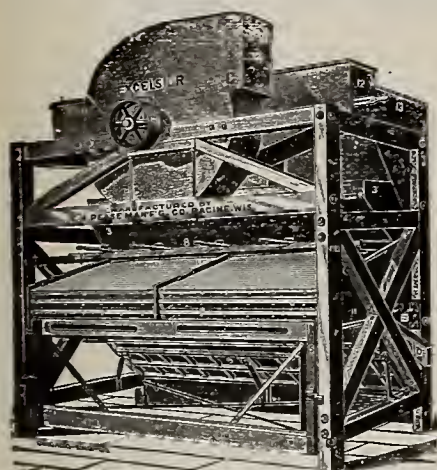
FARM AND WAREHOUSE FANNING MILLS.

GRAIN TESTERS, SEED TESTERS,
PERFORATED METALS, WIRE CLOTH,

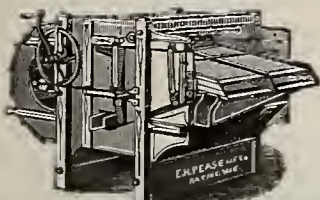
**Power Car Pullers, Oat Clippers, Dustless
Receiving Separators,**

POLISHERS, SEPARATORS, GRADERS,
FLAX REELS AND SPECIAL FLAX MILLS.

"OVERHEAD," "SWEEP" AND "TREAD" HORSE POWERS,
BAG-TRUCKS, WAREHOUSE TRUCKS, ETC.



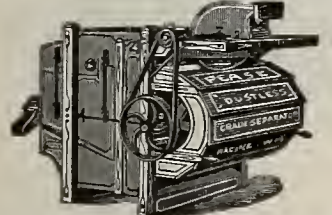
EXCELSIOR DUSTLESS ELEVATOR SEPARATOR,
Cleans, Separates and Grades Perfectly.
HAS NO SUPERIOR IN THE WORLD.



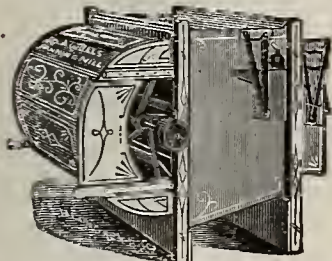
Pease Side-Shake Mill for Warehouses.



Pease End Shake Mill for Warehouses.

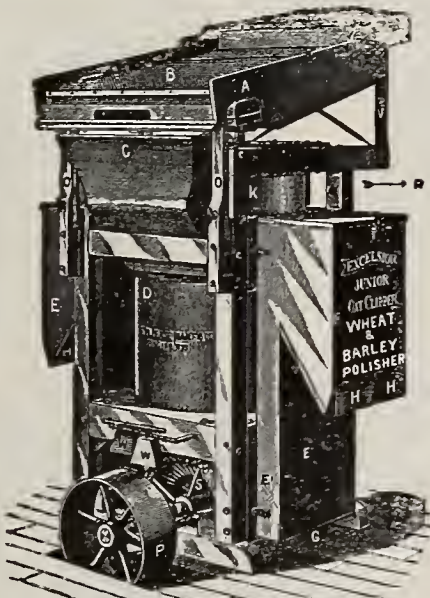


Pease Dustless Separator for Warehouses and Mills.



"Wells" Warehouse Mill.—Extra Large Capacity.

IT WILL PAY
YOU
TO GET OUR
CATALOGUES
PRICES
AND PROOFS OF
SUPERIORITY
BEFORE BUYING
ELSEWHERE.



EXCELSIOR JUNIOR

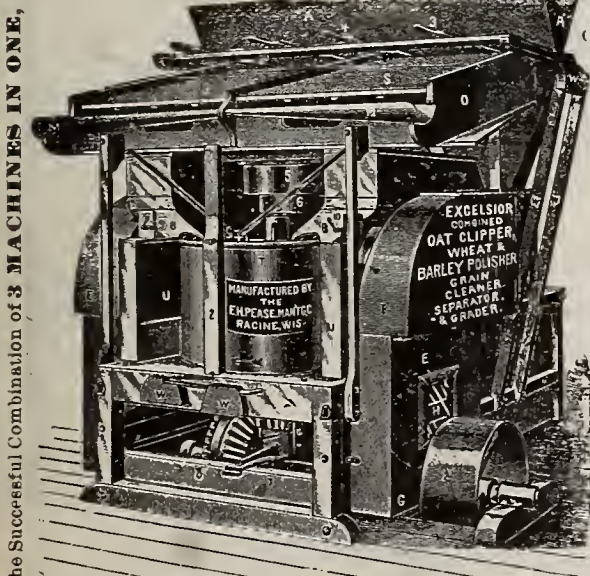
Oat Clipper, and Wheat and Barley Polisher, is the Simplest, Most Compact, **LIGHTEST** Running, Quickest Adjustable Machine of its kind made

WE FULLY WARRANT
THE
SUPERIORITY
OF THE
MATERIALS USED,
THE CONSTRUCTION and
Operating Qualities
OF ALL OUR
MACHINERY.

ADDRESS

LETTERS CAREFULLY

—TO—



EXCELSIOR COMBINED

Oat Clipper, Polisher, Separator, Grader and General Dustless Elevator Separator.

This Machine has no Legitimate Rival in the World.
Send for particulars.

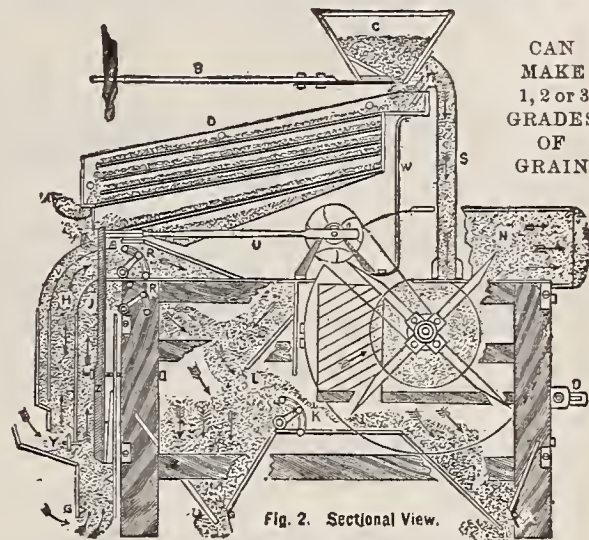
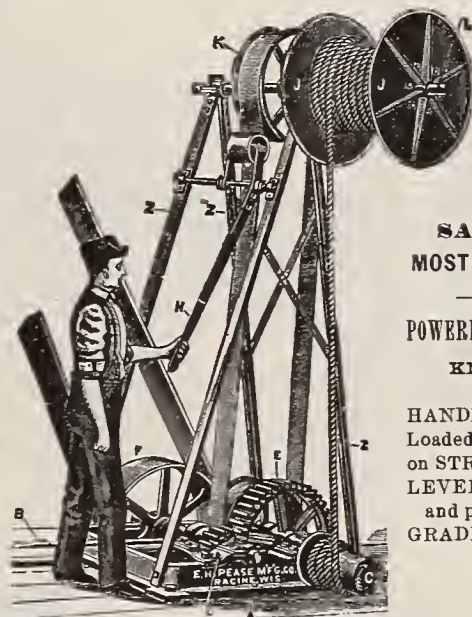


Fig. 2. Sectional View.

EXCELSIOR SEPARATOR AND GRADER.

The Finest Wheat or Barley Machine on Earth



"HERCULES" POWER CAR PULLER.

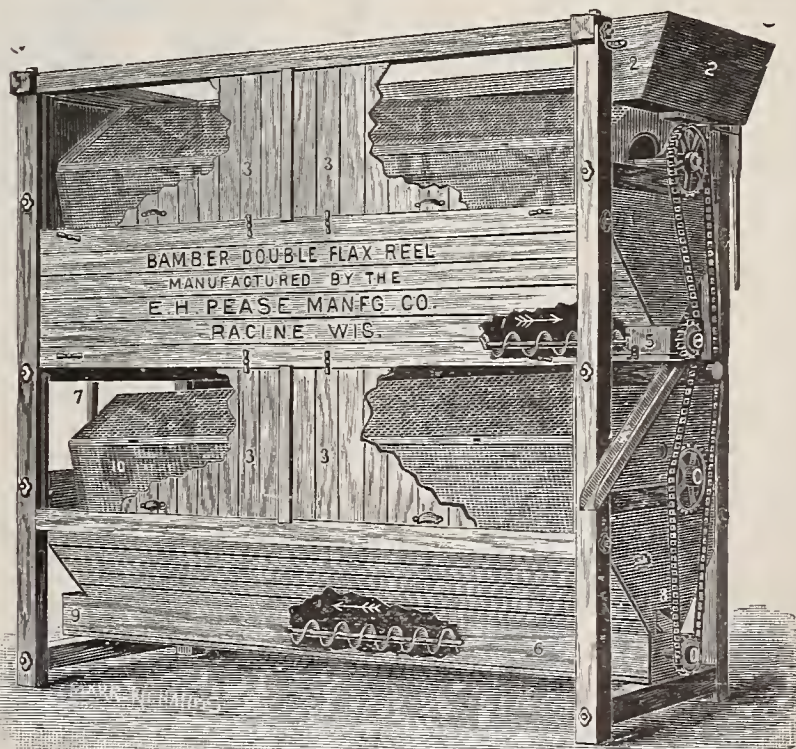
**SAFEST,
MOST DURABLE
—AND—
POWERFUL PULLER
KNOWN.**

HANDLES 1 to 20
Loaded Cars at once
on STRAIGHT and
LEVEL TRACK
and pro-rata on
GRADES and
CURVES

PEASE
SPECIAL
FLAX MILLS
ARE
SUPERIOR
TO ALL OTHERS.

OUR FLAX REELS

Are Adopted and in more General Use by
THE MOST EXTENSIVE FLAX HANDLERS
Throughout the United States, than any similar Machines made



Made with 1, 2 or 4 Reels in one Chest, and with or without Scalping Shoe.

Reels of any desired style or dimensions made to order.

E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.

BRANCH OFFICE, No. 6 CORN EXCHANGE, MINNEAPOLIS, MINN.

FAMOUS HAND OR POWER CLEANERS FOR COUNTRY ELEVATORS.

The Successful Combination of 3 MACHINES IN ONE.

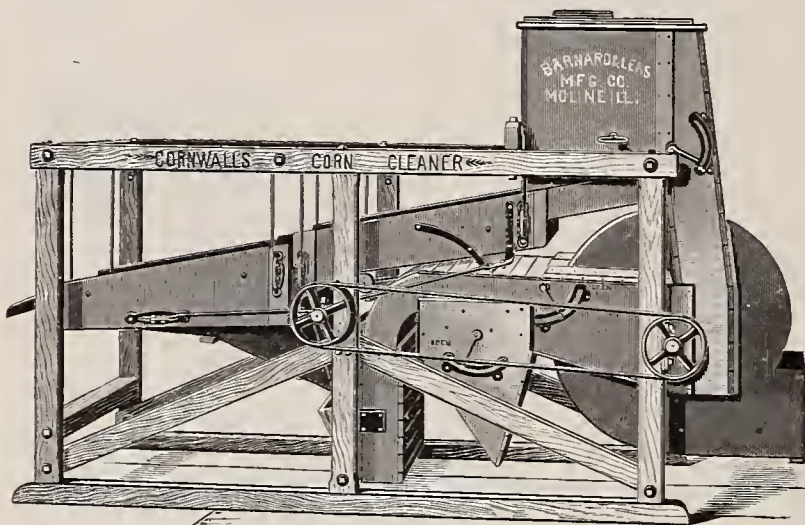
BARNARD & LEAS MANUFACTURING CO., MOLINE, ILLINOIS.

Sole Manufacturers of Barnard's Grain Cleaning Machinery.

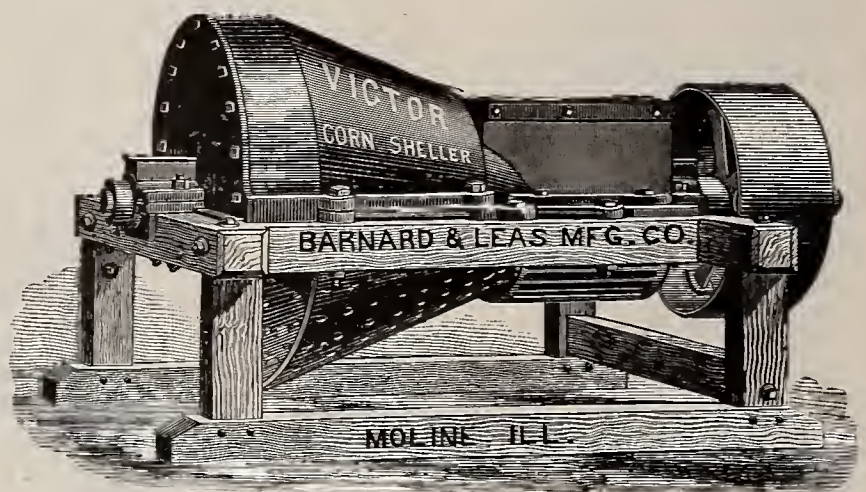
See these machines at work before purchasing.

The Barnard Grain Cleaning Machinery is built in a greater number of sizes, in a greater number of styles, and for a greater variety of uses in the mill and elevator than any other.

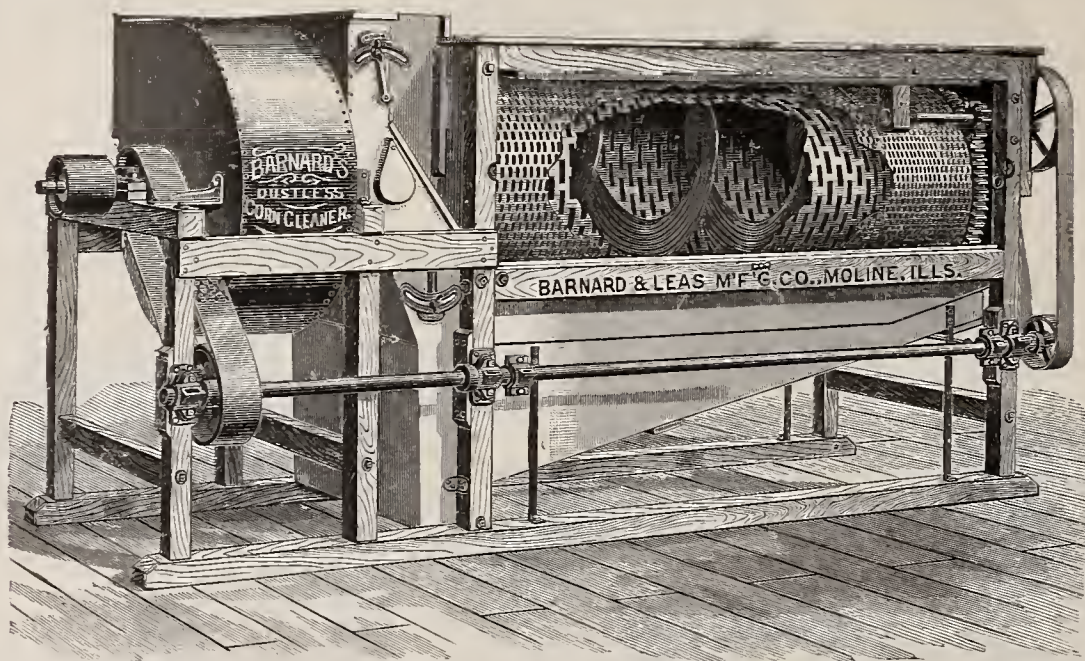
105 Barnard Cleaners were sold during the month of June for mills to be built and remodeled by us, for Elevators and Warehouses and incidental sales.



Cornwall Corn Cleaner.



Corn Sheller.



Double Screen Corn Cleaner.

SEND FOR SPECIAL CATALOGUE OF ELEVATOR MACHINERY.

OUR AGENTS.

M. M. SNIDER, 1325 Capitol Avenue, Des Moines, Iowa,
General Agent Iowa and Nebraska.
J. M. ALLEN, Fergus Falls, Minn.,
General Agent Minnesota, North and South Dakota.
J. F. PAYNE, Indianapolis, Ind., Room 3 Chamber of Commerce,
General Agent Indiana and Eastern Ill.
LEGRAND PAYNE, Indianapolis, Ind.,
Asst. Agent Ind., Eastern Ill.
G. M. RANDALL, Enterprise, Kan.,
General Agent Kansas, Colorado and Oklahoma.
J. H. WILLIAMS, Lock Box 203, Columbus, Ohio.
General Agent for Ohio.
WATEROUS ENGINE WORKS CO.,
Winnipeg, Manitoba.
R. C. STONE, Springfield, Mo.,
General Agent for Missouri, Arkansas and Texas.

W. T. ELLSTON, Springfield, Mo.,
Asst. Agent for Missouri, Arkansas and Texas.
W. H. CALDWELL, Springfield, Mo.,
Asst. Agent for Missouri, Arkansas and Texas.
H. R. STAGGS, Springfield, Mo.,
Asst. Agent for Missouri, Arkansas and Texas.
W. B. TALLEY, Paducah, Ky.,
General Agent for the Southern States.
C. P. WATTERSON, Farmington, Utah,
General Agent Utah and States West.
E. D. CAIRL, Colesburg, Iowa,
General Agent for Wisconsin.
CHAS. E. MANOR, P. O. Box 5, Stanleyton, Page Co., Va.,
General Agent for Virginia, W. Virginia, Maryland
and North Carolina.
WM. R. DELL & SON, London, England.

EUREKA



Grain Cleaning Machinery

THE GREATEST VARIETY
THE LARGEST CAPACITY
THE LARGEST NUMBER AT WORK } IN THE WORLD.

THE NEW IMPROVED *Eureka*

*BY Far the
Best Separator
on the Market.*

We make every part of this machine
under our own

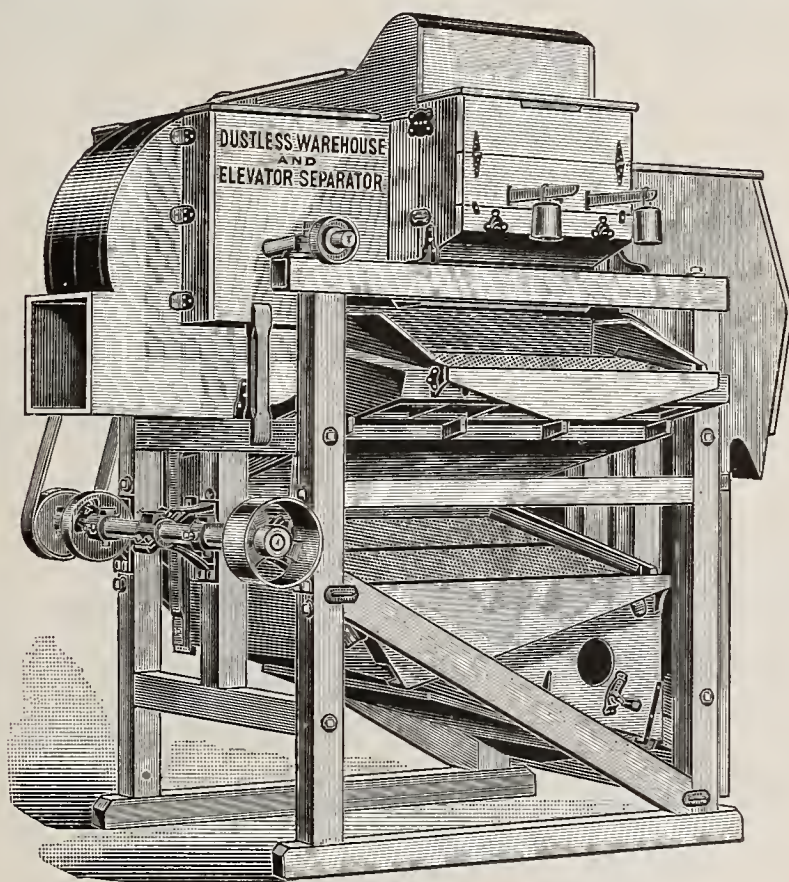
PERSONAL SUPERVISION,

and are thus in a position to guarantee
it as to material and workmanship.

Will positively do more and better
work than any other Separator.

Wide Suction.
Perfect Separation under Control.
Interchangeable Screens.
Large Cockle Screen.
Automatic Feed.

Will run perfectly smooth and quiet.
Has large capacity.



WILL SHIP ONE ON 30 DAYS' TRIAL.

*Warehouse
and
Elevator
Separator,*

WITH LATERAL-SHAKE
MOVEMENT
OF SCREENS.

Conceded by all to be the best arrangement for
ridding grain of impurities. Has Counter-balances
and new Pitman Drive.

READ WHAT USERS SAY OF THEM:

CLYDE, N. Y., May 21, 1894.

MR. S. HOWES, Silver Creek, N. Y.

DEAR SIR:—I enclose you check for \$..... to
balance account for the Eureka Warehouse Separ-
ator. I take pleasure in informing you that I am
much pleased with the machine, which has done
good work from the start.

Yours truly, GEO. B. GREENWAY.

YORK, PA., July 18, 1894.

MR. S. HOWES, Silver Creek, N. Y.

DEAR SIR:—We are in receipt of your favor of
the 16th. The Warehouse and Elevator Separator
sold us by you is giving us great satisfaction. We
are not in the habit of recommending any ma-
chines, but must speak well of this one.

Yours truly, P. A. & S. SMALL.

Address

THE S. HOWES COMPANY, Silver Creek, N. Y.
SOLE BUILDERS.

GRAIN CLEANERS.

IF YOU ARE IN NEED OF A PERFECT GRAIN
CLEANER, WE OFFER YOU

The Monitor Separator

These machines have stood the test and are pronounced by leading elevator operators, superior to anything heretofore used. Their opinions are based on actual experience.

Nearly all of the leading cleaning elevators built during the last four years have adopted

— **THE MONITOR** —

They are simple, yet perfect in construction and durable.

They do the maximum of work with the minimum of power.

They have a powerful, but perfectly controlled air current.

They can be quickly adjusted to do any class of work desired.

They will give you grand satisfaction.

They are modern machines, and you will find them in all of the modern cleaning houses.

If you are interested in this line we ask you to investigate.

BARLEY.

We are making a special **BARLEY CLEANER**
that stands at the head.

FLAX.

Our **Monitor Flax Cleaner** will give you good
results. Close work with large capacity.

Huntley, Cranson & Hammond

SILVER CREEK, N. Y.

B. F. RYER, GENERAL AGENT, 799 MONROE STREET, CHICAGO.



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THE CRUSADE AGAINST PUTS AND CALLS.

Since the new president of the Chicago Board of Trade made his inaugural address, most of which was published in our January number, many of the members have worked strenuously to bring about some of the reforms outlined by President Baker. An effort is being made to have the state legislature enact additional laws regulating the inspection and storage of grain. At the urgent request of President Baker the Board also attempted to carry the reform movement within its own membership and tried to stop privilege trading, which has been a curse to the Board for years and lowered every member in the estimation of many good people.

This violation of the Board's rules and the breaking of the state laws has always been discountenanced by a large number of the Board's members. During Mr. Baker's former terms as president an effort was made to stop this illegal practice, but it has never been stamped out and it never will as long as men have confidence in the honesty of one another and desire to trade in privileges.

At the inauguration of the new president a resolution was adopted declaring against privilege trading. A week later the directors endorsed the following amendment to section 9, which was posted ten days and then submitted to a vote of the members: "Section 9. When any member of the association shall be guilty of improper conduct of a personal character in any of the rooms of the association, or when any member shall be guilty of a willful violation of any business contract or obligation, and shall neglect or refuse to equitably and satisfactorily adjust and settle the same, or when any member shall willfully neglect or refuse to comply promptly with the award of any committee of arbitration or committee of appeals rendered in conformity with the rules, regulations and by-laws of the association, or when any member of this association shall be guilty of trading in privileges, directly or indirectly, in his own behalf or for or through others or shall make himself or allow himself to be made a party to a contract arising out of a privilege, or when any member shall violate any of the rules, regulations or by-laws of the association, or when any member shall be

guilty of making or reporting any false or fictitious purchases or sales, or when any member shall be guilty of any act of bad faith or any attempt at extortion, or of any other dishonorable or dishonest conduct—he shall be censured, suspended or expelled by the board of directors, as they may determine from the nature and gravity of the offense committed.

quorum sitting at a regular or adjourned meeting of the board of directors shall be necessary to censure or suspend, and an affirmative vote of at least twelve members of the board of directors shall be necessary to expel."

The amendment was voted upon February 4 and was lost by a vote of 505 for and 604 against. Mr.

Baker, believing that the members would not give him their support in any of the reforms desired, resigned the presidency of the Board. At a meeting of the members his resignation was laid on the table by a vote of 4 to 1 and a committee appointed to wait upon him and urge him to withdraw his resignation. They induced him to withdraw his resignation, the Call Room where the trading in privileges was carried on every afternoon was closed and no trading in puts and calls will hereafter be permitted in the building. This frees the Board of Trade of the stigma and it has already had the effect of inducing many to stop trading in privileges.

Although neither side gained a decisive victory the privilege traders have been denied further use of the building for the purpose of dealing in puts and calls. The president and many of the members are opposed to privilege trading because they believe it to be wrong as well as a violation of laws and rules. They are prompted by a high moral purpose, and the people outside are anxious to see them win. The public recognizes only the moral side of the question and desires privilege trading stopped entirely. Few persons not familiar with the business on the Board are able to distinguish the legal from the illegal transactions, the good from the bad, and naturally enough they frequently condemn the entire business as gambling, and blindly demand the abolition of all commercial exchanges. When privilege trading has been abolished in its building this charge cannot be justly made

against it, but its members may rest assured that as long as any large number of persons recognized as members of the Chicago Board of Trade get together every afternoon and trade in privileges, the general public will blame the Board, and legislators will continue to introduce bills providing for taxing the Board's business out of existence.

The Illinois law provides that, "Whoever contracts to have or to give to himself or another the option to buy or sell at a future time any grain or other com-



WILLIAM T. BAKER.

Any member suspended from the privileges of the association shall not be allowed to use the clearing-house, settlement or delivery room during such suspension, and shall not be permitted to trade upon the floor of the Exchange, either through a broker or employe. Any member of the association trading, or offering to trade, either as a broker or employe, giving the name of a suspended member, shall be considered as having violated a rule of the association, and shall be liable to discipline therefor. A majority of a

modity, stock of any railroad or other company, or gold; or forestalls the market by spreading false rumors to influence the price of commodities therein, or corners the market or attempts to do so in relation to any such commodities, shall be fined not less than \$10 nor more than \$1,000, or confined in the county jail not exceeding one year, or both; and all contracts made in violation of this section shall be considered gambling contracts and shall be void."

Neither has the Board ever recognized such contracts, so no influence could be brought to bear upon delinquents. One member recently owed over \$100,000 lost in privilege trading, and he refused to pay a cent, although he has property. Others have also refused to pay, and this repudiation of their debts, together with several judgments secured recently against Board of Trade firms for money paid in cancellation of these debts, has done much to discourage trading in puts and calls among a class that does not possess high moral instincts, hence will not recognize the ethical point involved. This has given strength to the crusade of President Baker against the evil, in that it has greatly reduced the number of defenders of the illegal practice and their cause has been waning ever since they defeated the proposed amendment.

William T. Baker, who more than any other man is responsible for this move against the trading in puts and calls, is president of the Board for the third time, an honor never before conferred upon any member.

Mr. Baker was born in Herkimer county, N. Y., in 1841. He commenced to clerk in a country store when but 14 years of age, and after several years' experience he came to Chicago. In 1861 he entered the grain commission business and he is still engaged in that business. He commenced as bookkeeper for Hinckley & Handy, and several years afterward he succeeded Mr. Handy. In 1868 the firm of Baker & Co. was formed. It continued to 1872, and since then it has been W. T. Baker & Co. He was president of the local directory of the Board of Managers of the World's Columbian Exposition. He has considerable influence in politics, but has never held a political office. A prominent society man, he is a member of several clubs.

The personal characteristics of Mr. Baker have been ably described in the "World's Fair City" by Secretary Stone, who has been long and intimately connected with him. Mr. Stone writes as follows:

"The career of Mr. Baker has been that of a typical progressive American. He is endowed with keen and discriminating mental characteristics of an intensely active temperament bordering upon impetuosity, yet so nicely adjusted as not to violate the dictates of good judgment. Courageously ambitious and of an indomitable will he early grappled with humble surroundings and with a sublime confidence determined to carve out for himself an honorable and eminent mercantile position. Toward that position he steadily and unfalteringly advanced step by step through subordinate experiences until in the very prime of his manhood he is recognized in the great markets of the world as an eminent, successful and honorable merchant.

"Mr. Baker possesses those qualities inseparable from strong characters which hold a man self-poised and imperturbable in times of great tension, when many men are overpowered, disheartened and defeated. In such times his latent capacities are brought into requisition and stamp him as the exceptional man that he is—qualified to discharge great responsibilities and to confront serious emergencies. With a remarkable mental alertness he seizes upon the salient points of a question and fairly rushes at correct conclusions. This enables him to quickly organize and to rapidly consummate his plans. His confidence in himself does not prevent him from carefully weighing the views of others.

"Mr. Baker is sensitively alive to the personal responsibility which a public trust imposes, and he scrupulously discharges his official duties. His convictions are strong and well defined, and his determined advocacy of them expressed regardless of their effect upon his personal popularity."

A uniform grading of hay secures for purchasers a definite knowledge of all goods to arrive.

A SHORTAGE DETECTOR AND AN ADVERTISEMENT.

BY OBSERVER.

The way of the transgressor is hard. So also is the way of the inventor. These statements are generalities, of course, as we all know of instances of smooth sailing and uninterrupted successes for the notorious transgressor as well as the unmeritorious inventor. We know also of instances of ill-starred probity and fruitless energy: of inventors who have died in want and destitution while those who have succeeded to the management and control of their inventions have lived on in wealth and opulence. Such a state of affairs seems at first sight to be at variance with the fitness of things, but this is in reality seldom the case.

The unsuccessful business man of unimpeachable integrity and tireless energy lacks tact and foresight. The unrequited inventor lacks ordinary business sagacity and stupidly lets slip through his fingers that which he might have held with a strong hand. These defects on one side result in effects on the other and no one is censurable. Tireless energy in the pursuit of legitimate aims is certain to result in good to someone, but it does not follow that he who sows his energy should reap its benefits. Much depends on the manner in which his energy is applied. For this reason it often happens that the inventor of a really valuable device fails utterly in sharing the profits of his invention. And in such cases we are likely to hear woeful tales of fraud and deception and what not by which the ingenious inventor is shorn of his fortune when it was almost within his grasp. I have noticed too that the more woeful tales are told of the least practical inventions and that the impracticality of the inventor has developed a more prominent bump on his cranium than has his inventive talent.

There is a sort of pot-of-gold hallucination which affects the minds of perhaps ninety-nine inventors out of a hundred. Perhaps this proportion of inventions is the result primarily of visions of the pot of gold which is certain to be found as soon as the patent has been obtained. Almost anybody can invent something when the mind is stimulated by intoxicants of this sort. Probably the majority of patents issued for car couplers are the result of this sort of feverish state of mind. It is probably true that only two classes of inventors are successful, namely, those who invent because they are inventors born, and who study and work incessantly for the love of it, and those who meet an obstacle or a necessity which must be overcome for reasons other than considerations of money as the result of the invention. Of this latter class many inventors of really meritorious devices do not go to the expense of patenting their inventions or even furnishing a description of their invention to the public. The device answers their purpose and their interest in the thing as an invention comes to an end. These are, however, exceptional cases. A device of general utility is usually patented: whether the inventor ever succeeds in getting it before the public is another matter.

For the benefit of those whose inventions remain under a bushel for lack of means and method in bringing it before the public, I will relate my own experience, which I presume will prove to be not dissimilar to the experiences of many others. My invention was one of necessity. I had no thought of inventing anything for the purpose of making money out of it. The thing I wanted was for our own use and was to be a labor-saving device in which I was personally interested. How it came to be "put on the market" points what may be called a moral for those who try to do business without advertising. For nearly eighteen years I held the position of grain accountant for the L. S. & M. S. Railway elevators at Toledo. Among other things it was my duty to attend to claims for shortages. These claims were not particularly troublesome when they came first from the shipper to our manager. It was otherwise, however, when they came through our general offices at Cleveland. There was a deal of writing to be done. Original statements had to be supplemented with numerous "re-investigations," and there was no end to the tape of vermilion hue for which railroad office work is noted.

Of this business I became thoroughly tired. Our weighmen were always right (they never made any

mistakes) and my letters in answer to claims came to have a sort of stereotyped phraseology which was ludicrous when it was not exasperating. I was just as positive that our men were making mistakes as I was that shippers were making mistakes. Between the manager and myself a dozen different schemes had been invented and dropped as impracticable.

One day, years ago, a surplus shipment of 1,600 pounds came in from one of our grain houses that was being "cleaned out" by our traveling grain auditor. This "jag" weighed out 600 pounds. To this our man admitted "under the circumstances" that the jag should weigh 1,000 pounds more. This was the first proof that I had been able to establish against our men, and it went a long way in strengthening my theory that much of our trouble was due to the fact that there was no check where it was most needed.

Our elevators were supplied with track scales. As a check against the work of deducting the tare from the gross we were in the habit of footing the three columns of weights, gross, tare and net, and then balancing the tare and net against the gross. It occurred to me that if some such plan could be adopted for balancing the weighman's entries with the original figures on the scale beam we would then be able to detect and correct errors in the weighman's entries as well as our own. A practical plan was at last hit upon, but it necessitated a change in the scale beam. Our manager was thoroughly convinced of the value of the new check; but the particular bolt of tape of crimson hue, which it was found necessary to unwind in order to get this change made in the scales, seemed to be interminable. I had a model made. We explained the principle to our division engineer, who saw at once that it was a good thing. Then the matter was carried to the chief engineer and the general superintendent and they both admitted that it was a practical check and ought to be adopted. But it wasn't. Not right away. Why? I did not know then, but I found out since that no changes could be made without the approval of the general manager, and that it was an easier matter for me to get the matter before the general superintendent than for the latter to make the matter plain to the general manager.

Then it occurred to me that perhaps I could get the owners of some of the other elevators to adopt it; and I singled out a prominent gentleman on Water street because he always recognized me pleasantly in the street cars and elsewhere and had been quite as free to talk to me about the weather and the coming crops as if I had been a member on 'Change instead of a clerk in an elevator office. I remember now that I never saw that benevolent physiognomy look so hard and chilling as when I had explained the object of my call. He did not even look at my model, but remembered an engagement on 'Change and left me as unceremoniously as if we had never visited on the horse cars or talked crops together. This froze my enthusiasm, but it thawed out again after awhile. Then I carried my model and my arguments to the superintendent of the ——— elevators and met with a trifle more encouragement; but he wouldn't consider it unless his foreman should approve of it, and even then no changes could be made in the scales without the consent of the manufacturers, as their guarantee would become invalid if any changes were made other than by themselves. In the meantime I had secured permission from our chief engineer to change one of our track scales at my own expense. All this time I had a valuable improvement which no one wanted.

Finally I went to Mr. ———, a young man who was interested in a new elevator and who was not impervious to new ideas. He saw through it in one minute. He said, too, that it could be applied to his scales without changing their efficiency in the least, and he gave me an order then and there to have the change made. He did more. He advised me to get that idea before the trade and that no other medium would serve my purposes as well as the AMERICAN ELEVATOR AND GRAIN TRADE. He talked enthusiastically about it—after the terms had been settled for changing his ten scales—which was truly exhilarating. I opened up a correspondence with the above mentioned paper. The interest which was manifested as a result of my first appearance in the columns of this journal encouraged me to renew my struggle with our own people. The best that could be done with them, however, was to

put the device on their scales at the actual cost of the work. But I was glad to do this.

As a result of my first advertisement I received—not one order, but a great many letters of inquiry. It was not long, however, until there were orders, and in sufficient numbers to awaken the interest of the scale makers to the fact that there was a demand for a scale that would furnish a proof of the record of weights. Finally all of the Toledo elevators adopted this device, but not until it had come into use in prominent elevators in New York and Chicago and other large grain centers. So that I am quite sure now in looking backward over my years of experience that if it had not been for the timely advice and encouragement of the young man who recommended the AMERICAN ELEVATOR AND GRAIN TRADE my invention would have gone the way of many another.

While I was laboring with our company, and no doubt because I was unsuccessful in getting them to take any interest in the scheme for detecting errors, I was advised to sell the thing out at the first chance for whatever I could get for it. My friend's faith in the utility of the device was very naturally minimized by the fact that the company which should have been the first to avail themselves of its use were on the other hand entirely indifferent. But I knew more about the weighing of grain than our general manager; and in spite of all these depressing influences I finally disposed of the patent for more than *twelve times* the amount that was offered for it before the appearance of my advertisement in the columns of this journal.

There are now a number of devices on the market, any one of which is a thousand times better than none at all. If I were a grain shipper I would not ship to an elevator where no check existed on the record of the weighmen. I know that grain accountants make mistakes in handling the figures furnished them by the weighmen. Why then should it be assumed that the weighmen do not make mistakes in handling these same figures when they do so under much less favorable conditions?

The long and short of it is that shippers nowadays have only themselves to blame if they suffer from large shortages. Let them provide proof of their weighing and then insist on having their weights. We always handled cars from certain shippers with more care than others, and the reason was that they were looking sharp after their weights and were making it unpleasant for us whenever there was a discrepancy.

For these shippers our weighmen came to have a sort of disrespectful respect. In taking a memorandum of the waybills they were careful to note Mr. Smith's weights "to see how they would come out." This was as it should be; but if Mr. Smith and Mr. Brown and a few others had not exercised their recalcitrant proclivities they would not have fared so well I am sure. As I am no longer a grain clerk and never expect to be again I hope that shippers will consider what I have written as coming from a disinterested source. When shipments of grain, subject to weight at destination, are handled without reasonable checks at destination it is nobody's fault but the shipper's.

Statistics just prepared at the New York Produce Exchange show that during the year 1894 not a bushel of grain was carried across the Atlantic in a steam or sailing vessel under the United States flag. Of the millions of bushels of cereals grown in the United States but 600 bushels of peas were exported last year under the American flag, and even that consignment was carried in an English-built steamer which had been granted an American register. That particular shipment of 600 bushels comprised the small surplus which could not be stowed away in the already overstocked hold of an English craft.

THE QUAST GAS AND GASOLINE ENGINE.

Until very recently the gas engine has been specially applied where only small power is required; its application for such powers as have hitherto been considered the province of steam is reserved for the future. A rapid examination of the most important inventions since 1791 will enable an idea to be formed of what has already been done and of what still remains to be accomplished. At that date gas was not an industrial product, and accordingly John Barber described what he considered the best processes for its production. He proposed to distill coal, wood, oil or other combustibles in a retort, and then by means of a pump to inject the product into a cylinder, where explosion takes place. A second pump injects air in suitable proportions, and ignition is effected by the flame of a match or candle. To avoid excessive heating he proposed the injection of water by a pump. Although Barber's machine could never have been a practical success, it is interesting as the first idea of an engine driven by explosive gas.

The fundamental idea of M. Beau de Roches is thus clearly seen to consist in the compression of the

dedicated horse power, employing a mixture of 1 of gas to 12 of air, compressing before ignition, and expelling the products of combustion at the usual temperature, viz., 430 O. C., is 0.74, being a maximum efficiency $4\frac{1}{2}$ times that of a good steam engine.

The gas engine is comparatively new, yet since the year 1863 the cost of working has been reduced to one-sixth. To-day large gas and gasoline engines are successfully operated, some as high as 325 horse power, and soon internal combustion engines will be used in places where at present we think it impossible. Some of our present gas engines, of larger sizes, have reduced the gas consumption to 18 feet per indicated horse power per hour, and the only drawback is the difficulty experienced by some in obtaining a uniformly even speed of rotation—a difficulty arising from the irregularity of explosions, which is caused by the governor, to effect the regulation of the speed of the engine. The irregularities caused by the irregular explosions are noticeable to the eye on the engine and also on the machinery driven thereby.

In view of the constantly increasing demand for gas and gasoline engines, the engine illustrated by the cut is brought before the public. In this engine all the above facts have been considered as far as practicable, and the result has brought forth an engine which excels others, it is claimed, in the majority of its points.

In the Quast Gas and Gasoline Engine an explosion takes place at every other revolution, but the force of the explosion is regulated by a governor, which controls the amount of fuel entering the cylinder. The engine operates under the well-known plan of the four-cycle of Beau de Roches. The novelty in this engine is that there is but one valve, which accommodates both the suction and the exhaust. It is of the rotating type, being automatically oiled and operated in such a manner that cleaning, grinding and regrinding are not necessary.

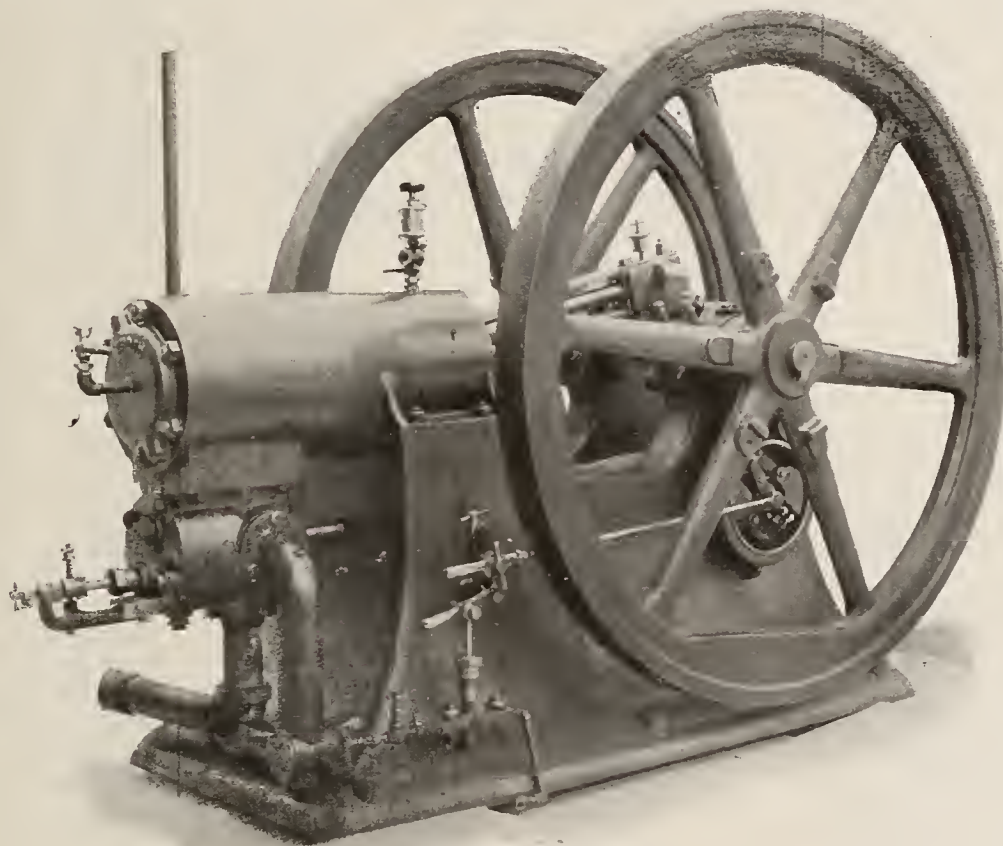
The ignition of the compressed charge in the cylinder is effected by an electric spark, which is claimed by the makers to be the best possible way. The Quast igniter consists of two small chemical electric magneto cells which are especially constructed for this purpose. The spark is so strong and effective that so far the speed of the engine has not been high enough

to cause it to fail to ignite, although the engine, at 11 horse power actual, was running 950 revolutions, minute, exploding every other revolution. There is absolutely no smell to the igniting device, and the chemicals of the cells need not be replenished for two years, but the cells have to be connected to an electric circuit, either incandescent or arc, for about three hours every six months, which can easily be done, the life of the cells being about six years. Electricity is used in conjunction with the chemicals, which are part of the cells when put up.

A small oil pump, worked and controlled by the governor, draws gasoline from the oil tank underground to the engine and forces it into the air mixer, no vaporizer being used; this takes place only during the out-stroke of the engine piston when it is drawing in a charge. Owing to the valve and igniting arrangement the engine can be run with safety at a very high speed, and has given great regularity.

Various tests were made with this engine and have given a gasoline consumption of $\frac{1}{8}$ of a gallon per horse power per ten hours. One of these tests lasted three days. Efficiency, economy, quiet and smooth running, general reliability, combined with simplicity and neatness of design, are the chief points claimed for it. The engine is started without any delay, the speed and the point of ignition are regulated without stopping the engine.

The inventor had years of experience in the gas engine line, and it is his aim to place on the market an engine which can be guaranteed, sold at a moderate



THE QUAST GAS AND GASOLINE ENGINE.

gaseous mixture to the greatest extent practicable before ignition. Manifestly the only way to do this is to use a single cylinder, first on account of the advantage of having as large a one as possible, and next to minimize the resistances of the mixture. Consequently, for one end of the cylinder, the following sequence of operations takes place during four consecutive strokes, inspiration during an entire stroke, compression during the second (return) stroke, ignition at the dead point, and expansion during the third stroke, expulsion of the burnt gas during the fourth (return) stroke.

This engine, it is claimed, fulfills the condition of the largest possible cylinder, and the still more important condition of initial compression. Moreover, the speed of the piston in proportion to its diameter is the greatest possible, since the work usually performed in two strokes is accomplished in one. In 1863 Mr. Hugon brought out his motor, in which ignition was effected by a gas flame controlled by a slide; the arrangement was ingenious, but the motor had only a moderate success.

Briefly stated this is the result of the most recent investigation into the working of the gas engines, it shows the complex chemical action which will have to be borne in mind in any attempt at improved working. The total heat given to the fluid is the same whether dissociation takes place or not, but the way in which the heat is supplied and the range of temperature are affected by it. The maximum efficiency of a motor using 22 cubic feet of gas per hour per in-

price and filling all requirements. Detailed information, prices, etc., may be obtained by addressing the manufacturers. The Quast Gas and Gasoline Engine Co. of Bucyrus, Ohio.

CLAIMS FOR OVERCHARGES.

One of the most frequent causes of complaint against railways by shippers arises from the delay incident to the settling of claims, says the *Railway Review*. This delay in a very large number of cases is owing to the lack of sufficient information for a proper adjustment, and for which the claimants are themselves chiefly to blame. This fact, however, does not make the complaint any the less real to the shipper nor any the less annoying to the railroad company, hence the necessity for the particularity of information specified in the following rule of the C., M. & St. P. Ry.:

"All claims for overcharge loss or damage to freight must be forwarded immediately to freight claim agent, accompanied by an itemized bill of the claim, bill of lading, or shipper's receipt given for the shipment, original freight bill and original invoice, copy of waybill and all notations thereon, duplicate of short or bad order report, and any other information which agent has or can obtain in relation to the claim. If claimant will not surrender the original invoice, the agent must examine the same and certify that claim is made at invoice price. If lost freight for which claim has been presented should be found afterward, agent must immediately notify freight claim agent of that fact."

Shippers will increase the chance of their claim getting through before they retire by following the foregoing explicitly.

THE BROOKLYN WAREHOUSE COMBINE.

The Brooklyn Storage and Warehouse Company, the big warehouse trust which was formed two months ago, and which has been assiduously gobbling up the Brooklyn water front property, has added to its possessions by the purchase of more than half of the Atlantic dock. It has secured possession of all the grain elevators, warehouses for the storing of general merchandise, the basin and piers, which comprises more than half of the dock company's property. The company filed articles of incorporation at Albany some time ago, the capital stock being \$12,500,000.

Thomas A. McIntyre of McIntyre & Wardwell, is the originator of the enterprise, and in speaking about the trust he said:

"As at present carried on the storage warehouse business is in a very unsatisfactory state. There are to-day upward of 1,500,000 bushels of wheat afloat in this harbor, which should be in storage. We have not in Brooklyn 1,000,000 bushels of oats, whereas, with proper facilities, we would have 5,000,000 bushels. It is not advantageous that commission merchants here should have large quantities of grain stored in Chicago and Joliet, and be obliged to do business through the former city. We want the grain right here, so that when we get a bid from Europe we know exactly where we stand. And, again, as concerns charges, we are in a state of confusion. The advertised charges are twice as high as those of Baltimore or Philadelphia, which cities are, on that account, getting business which legitimately belongs to New York and Brooklyn. We want a uniform rate, and propose to establish one of 3 cents a hundred."

"The lighterage charges now are simply exorbitant. The lowering of rates, as I am informed by representatives of steamship companies, will help our commerce abroad very materially, and, in fact, consolidation will give us the traffic now absorbed by Staten Island and Jersey City. The cars will be loaded and unloaded at the vessel's sides, and in time, with proper facilities, we shall do infinitely more business with less expenditure. That it will be a benefit to the city goes without saying."

One of the features the new company intends to make is a private railway connecting the entire property. The tracks are to be laid upon the large wharves, so that the cars brought on floats can be run to the ship's sides, or grain in one structure can be

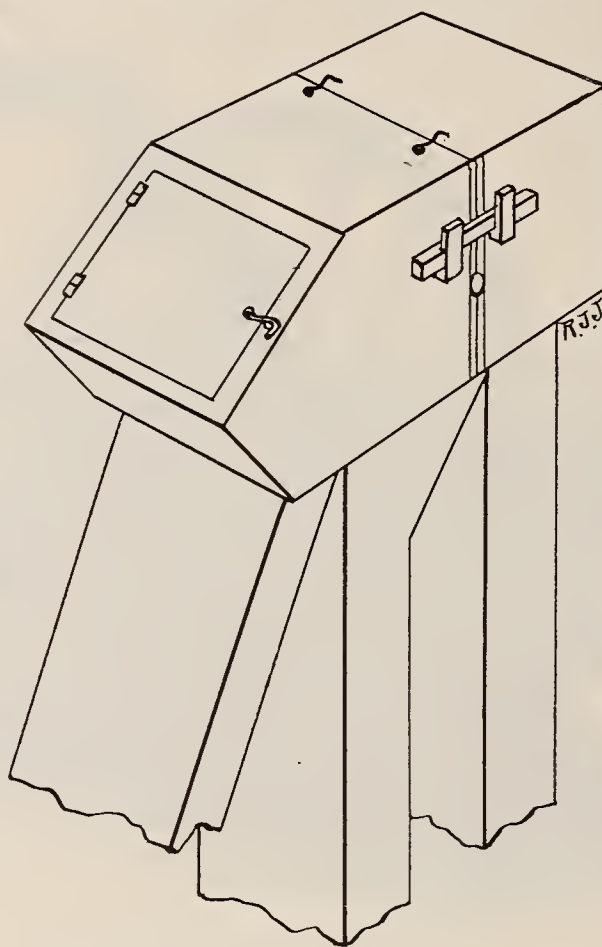
sent to a ship lying a mile away without the least difficulty.

Part of the money to float this great concern will be raised on first mortgage 5 per cent. fifty-year gold bonds, and part at 6 per cent. cumulative preferred stock. There will also be a portion of common stock.

The consolidated properties last year earned net \$1,500,000, and by the formation of the company it is expected that there will be a saving of at least \$550,000 in salaries and other accounts, and by this great saving the net earnings would amount to \$2,050,000.

AN IMPROVED ELEVATOR HEAD.

Is there any possible reason why an elevator head should be so securely boxed and nailed up that it has to be torn down to enable one to get at the inside? No one with common sense and a knowledge of his business now builds an elevator head with a horizontal board under the pulley. Yet in many elevators of recent construction, and where are only the best equipment in the way of power and machines, the elevator heads are tightly nailed at sides, and the bottom of



AN IMPROVED ELEVATOR HEAD.

the head made horizontal so it catches dust and grain. Such an elevator head often causes great annoyance and expenditure of work and money. While choke-ups at the head are comparatively rare, still they do occur from straw and dirt gathering at the throat of the spout. If such occur in the ordinary head the head would have to be removed to be remedied. Such would be the case in any accident, and in time the head becomes frail and leaky.

The accompanying cut illustrates a head designed by E. B. Krone of Galveston, Texas, which has been found a great improvement on those commonly used. The head is made in two sections, securely fastened at the sides and top, as shown in the cut. The cant board is so constructed that there will be no accumulation of dirt or grain in the head. The door at the front of the head allows an examination of the inside while the elevator is running. The opening should be far enough from the cups so that no grain will be thrown out. The cut shows the head with the door closed. If properly constructed, this elevator head will be found a great convenience in case of accident.

Ed. Pardridge, the Chicago wheat speculator, received a letter recently to this effect: "If you do not raise the price of wheat to 60 cents within the next ten days we will die together. I will kill you first and then kill myself." The limitation has expired, but Mr. Pardridge is still alive and well, thank you

THE BENEFITS OF EXCHANGES.

One of the most noticeable features in gathering and marketing the crops of this country is the tendency to do the principal part of the marketing through the various exchanges. This not true alone of grain, but of cotton, provisions and many other articles as well. People in the Northwest are very well acquainted with the system of marketing the grain crops through the exchanges, and knowing about it, they know that the cost between producers and consumers is much less than formerly. There was never a time before when the expense of handling the crops and marketing them was so small as it is now. The same results are as true in marketing the fruit crops of the South and Southwest as in the marketing of the grain in the Northwest, the cotton crop of the South, or provisions throughout the middle states. Recent reports from California and from Florida, as well as from sections of the country raising even less of fruits than the ones mentioned, show that the costs of handling their fruit products have been so reduced that really adapted to their cultivation has risen in value.

Not so very long ago the Orange Growers' Exchange in Southern California was organized. Previous to the organization banks were gradually calling in their loans on orange properties, on account of the depreciation in value of the properties, and readjusting on a new basis of values. After the organization of the exchange values again rose to the prices prevailing previous to the decline. The cost of handling the crop and getting it to consumers was reduced on an average of about 10 cents per box. The success attending the organization and conduct of the exchange increased the net returns of the growers and was found to be a true solution of the problem of arresting the decline in their profits and in their properties.

These exchanges supply the most expert labor and talent at a minimum cost, whether it be in grain or fruits. They furnish also a system of protection to all dealers in these articles, that enables them to bring their charges down. A few years ago it was not unfrequent to find that wheat in the Northwest was bought at 10 cents a bushel margin, and for many years the rule was to get 5 cents, while now the total allowance for charges between the farmer who markets in the country and the buyer who grinds the wheat into flour are less than 3 cents, and perhaps the average at the present time is very little more than 2 cents. To think of dropping the exchanges and returning to the old methods of handling grain and other products, would be no less absurd than to drop electricity and steam and return to the old horse conveyances of the past.—*Market Record*.

TIME SHIPMENTS.

The rules and regulations of the Chicago, Milwaukee & St. Paul Railroad for the guidance of railway agents provides that: "The company will neither undertake nor agree to carry freight by any particular train, or in time for any particular market, but will forward freight with as reasonable dispatch as the general business of the company will permit, and will not be responsible for loss or damage arising from unavoidable delays: nor for loss or damage to freight occasioned by either providential causes, the public enemy, mobs or fire."

In commenting on this rule the *Railway Review* says: As a matter of instruction for the guidance of agents, this rule is eminently proper, but as a statement as to the obligations of the company to the shipper it is at least open to debate. Contracts as to time may be and sometimes are made under direct instructions from the general office, but no agent can by any possibility be otherwise sufficiently well informed as to existing conditions to warrant his making such engagements in the absence of definite instructions. So far as the responsibility for loss or damage is concerned, that is a matter which is settled by law and not by the rule. The rule, however, is valuable as preventing the assumption of such liability by the agent.

The Minnesota Legislature has instructed its representatives in the United States Senate to oppose the anti-option bill.

JOSEPH'S GRAIN CORNER.

How can those who hold that grain speculation is gambling, and that no reference is anywhere made to that species of trading in the scriptures, possibly reconcile that contention with the colossal corner in grain which Joseph manipulated in Egypt, eclipsing anything of the kind ever attempted by such modern grain merchants as Messrs. John Sturgess, James Keene, and more recently by Mr. Mackay? These latter were all unsuccessful in their efforts to corner the market, and so probably would Joseph have been had there existed in his time the same rapid transit by rail and ocean steamships as the above speculators had to contend with.

Egypt was not the only country that grew corn by any means; but that amounted to nothing as far as Joseph and his corner were concerned; because in those days it was not possible to transfer the surplus crops of one distant country to another, on account of the absence of transportation facilities. "This may be all very true," say those who look upon Joseph's transaction as a legitimate one; "but Joseph held the actual stuff." So did the above named modern speculators, the great trouble with them being, they held too much of it. And the remarkable thing about these gentlemen, who by some are characterized as gamblers, is, that they followed Joseph's tactics exactly, by speculating on short crops and a famine. The writer well remembers the time when James Keene held millions upon millions of bushels of wheat in warehouses and elevators in Chicago and the Northwest, in anticipation of a European food famine; but he was less successful than Joseph, owing to his miscalculation of the famine.

So completely did Joseph corner the market, and such exorbitant terms did he exact from the Egyptians, that he soon drained them of their last shekels of gold and pieces of silver, and then by degrees absorbed all their cattle, flocks and horses, until he got their lands, and finally their own bodies, which he handed over to Pharaoh as bond servants.

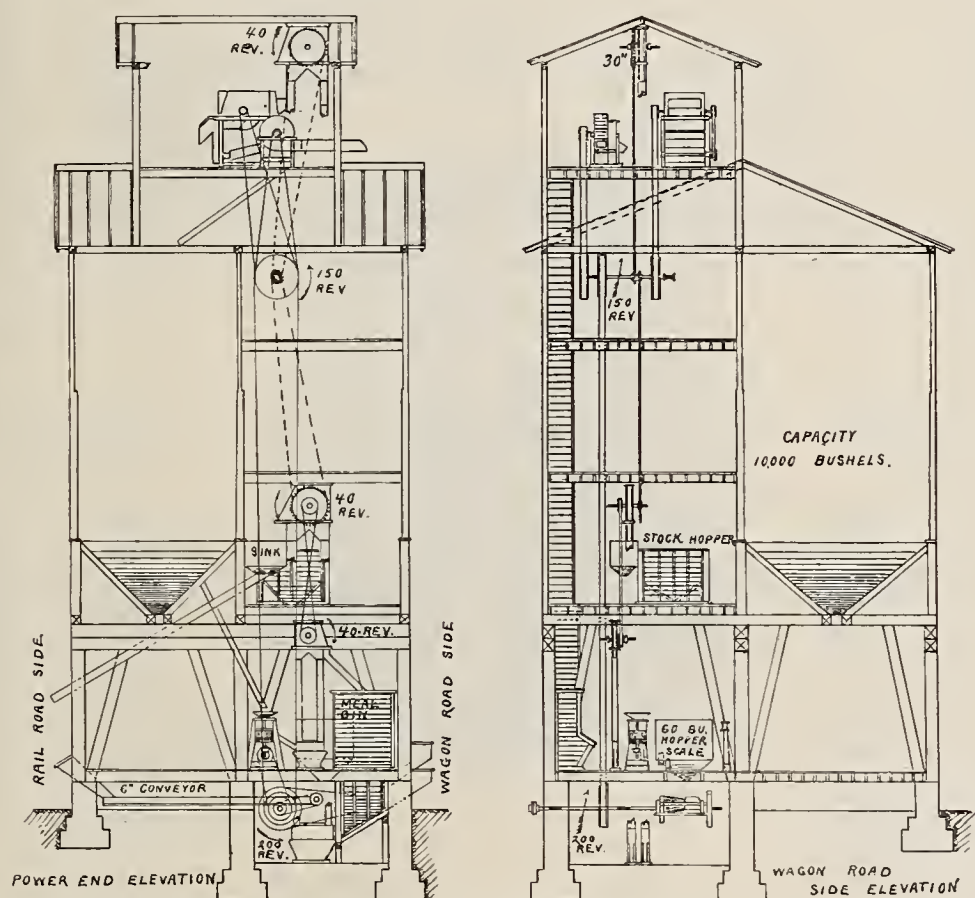
Seeing that nothing more could be extracted from them, as everything they possessed, even their own bodies, were confiscated to the King, Joseph, in order to make the most out of his famous grain corner, gave them seed wherewith to sow the land; but with a rare eye to business, he made a law which compelled them to give a fifth part of their crops in perpetuity to the King. After this, according to the records of the good old Book, Joseph and his father and his brethren dwelt in the land of Egypt, grew rich in possessions, multiplied exceedingly, and had a magnificent time, second only to that of Pharaoh the King. And well they might on the profits of that memorable grain corner which, it is estimated, yielded Joseph and Pharaoh equal in our money to at least forty or fifty million dollars, besides the fifth part of the people's crops which was turned into the King's treasury later on.

In our estimation, there have been only two really successful grain corners, namely, that of Joseph in ancient days, and that of "Old Hutch" in the nineteenth century. The latter took place in Chicago in September of the year 1888, when Mr. Hutchinson performed one of the greatest speculative feats ever attained, as he speculated on late deliveries of the new crop, just as Joseph did on the famine; and after buying up most of the spot wheat, he bought additional large quantities to be delivered in September. Those who sold made sure of being able to deliver the wheat on or before the 30th of September, as per contracts; but, to their astonishment, the new crop did not move as early and freely as they expected, and the result was that, as Mr. Hutchinson owned all the cash stuff, they were obliged to go to him for their wheat before they could effect deliveries, and conse-

quently he made them pay \$2 per bushel for it, which showed him profits all the way from 50 cents to \$1.15 per bushel. In September of that year the price of wheat in Chicago rose from about 89 cents to \$2 per bushel, and Mr. Hutchinson became like Joseph, a millionaire; but, unlike Joseph, he knew not how to keep the fortune he had accumulated.

Both Joseph and Mr. Hutchinson bought the actual grain, and stored it, in anticipation of contingencies which turned out correctly, and the results to each were the same—enormous profits. Now, if Messrs. Keene, Sturgess, Mackay and Hutchinson were gamblers, as some endeavor to make out, in what position is Joseph left, and how can they consistently say that nowhere in the scriptures is there any allusion made to gambling? Of course, Mr. Hutchinson was blamed for exacting \$2 per bushel from those who were compelled to buy of him; but what of Joseph's exactions from those poor Egyptians who were compelled to buy of him? They not only had to give up all their money, but their cattle, flocks, horses and lands; and, as a last resort, had to pawn their own bodies in bondage to Pharaoh and his prime minister Joseph.

Readers, however, must remember that after all



PLAN OF A COUNTRY ELEVATOR.

there was no real famine in Egypt; but on the contrary, there was enough and to spare, for as soon as Pharaoh had come into possession of the Egyptians as bond-servants, and owned their lands, Joseph, in order to secure the richest results of his grain corner, namely, one-fifth of the nation's crops in perpetuity, gave them all the grain they needed for seed, as well as for food from that time until harvest. After the poor Egyptians were stripped of everything they possessed, there was no mention of any scarcity of food, notwithstanding that a considerable period elapsed between then and the next crop. No greater proof can therefore be adduced in confirmation of the fact that there was in reality no famine, but merely a threatened one, which Joseph turned to such profitable account for himself and his master.—*Trade Bulletin.*

A state convention in the interest of good roads was held at St. Paul, Minn., January 15. A movement for good roads is in direct interest of the grain man, and he will lose nothing in giving it attention.

These are times of many economies, and the resources of the feed man are boundless. A cereal mill at Omaha, Neb., is charged with grinding up corncobs and selling them for bran. This sort of "bran" costs \$200 per carload, while the real costs \$300. The milkmen here have been puzzled by the small amount of milk produced by their cows since this bran was placed on the market a month ago. Corncobs have the quality of drying up a cow.

A COUNTRY ELEVATOR.

BY A. B. HAYES.

The erection and equipment of an elevator, especially a small one, is sometimes considered a very simple matter, to be undertaken by any experienced carpenter, or even a "country barn builder" and superintended by the prospective operator or owner. Many hard experiences have demonstrated the fact that the economy of building one's own elevator without plan or system is often accounted for in less than a month's run.

The accompanying drawings are plans showing end and side elevations of a working elevator with a storage capacity of 10,000 bushels, and capable of handling 600 bushels per hour. By following these plans a country elevator can be built at a cost of \$3,000 to \$6,000 according to locality. This elevator is 26x32 feet on the ground, and the working end is four stories high with a cupola. There are three bins and elevator well, each 12x14 feet inside. The working floor is 3 feet above the ground, making it convenient to handle grain to and from car and wagon.

In receiving grain it may be taken from car or wagon by means of a 6-inch conveyor or dumped through the chute to the short elevator, which elevates and spouts it into a bin over the 60-bushel hopper scale on the first floor. After the grain is weighed it is spouted to the longer elevator and carried to a No. 2 Richmond Separator, and cleaned. It is then distributed to the bins. Grain may be discharged to cars from bins or weighed before it is delivered. Ear corn is received from wagon and dumped into a chute to a corn sheller. The shelled corn is elevated and discharged into a suction fan and cleaned, and then goes to bin.

In connection with this elevator is a mill suitable for grinding feed and meal in exchange for grain. The power plant is not shown in the drawings. Power may be connected direct from engine or by belt or rope transmission.

The end studding of this building should be 2x8 inches to about the middle of the second floor, 2x6 inches to the middle of the third, and 2x4 inches to the roof. On the working side of the elevator the studding should be 6x6 inches to the roof of the cupola, which has 2x6-inch studding; the storage side may be the same as at the ends.

The main line shaft is 14 feet in length, $2\frac{7}{8}$ inches in diameter and runs at a speed of 200 revolutions. The counter shaft is 7 feet 6 inches long, $2\frac{3}{8}$ inches in diameter and runs at a speed of 150 revolutions. The main line pulley is 30 inches in diameter with $6\frac{1}{2}$ -inch face; the main line pulley on the counter shaft is 40 inches in diameter with $6\frac{1}{2}$ -inch face. The shaft of the elevator on the first floor is 3 feet long, $1\frac{1}{8}$ inches in diameter, running at a speed of 40 revolutions. The elevator on the second floor has a shaft 3 feet 6 inches long, $1\frac{1}{8}$ inches in diameter and runs 40 revolutions per minute. The pulley in the lower elevator is 16 inches in diameter and has $3\frac{1}{2}$ -inch face; the pulley in the upper elevator is 24 inches in diameter with $3\frac{1}{2}$ -inch face. These heads are connected with a belt running on 16-inch pulleys with $\frac{1}{2}$ -inch face.

The shaft on the elevator on the second floor has a 30-inch sprocket wheel which transmits power by chain drive to an 8-inch sprocket on the countershaft. Another sprocket wheel on the countershaft is connected with chain drive to the elevator head in the cupola. The countershaft has also two pulleys 40 inches in diameter with 6-inch face, from which the corn sheller and the separator are run. The elevator head in the cupola has a shaft 3 feet long, $1\frac{1}{8}$ inches in diameter, running at a speed of 40 revolutions. The pulley is 24 inches in diameter with $9\frac{1}{2}$ -inch face.

The grain dealers of this country need strong, aggressive local and national associations, with active officers to keep pushing the work.

A PORTABLE GRAIN DUMP.

Charles L. Young of Imogene, Iowa, has invented a portable grain dump, which may be readily transported from place to place.

Fig. 1 is a plan view of the machine. Fig. 2 is a section taken longitudinally on the line 2-2 of Fig. 1; and Fig. 3 is a transverse section through the machine, taken essentially on the line 3-3 of Fig. 1.

In carrying out the invention a bed of any approved shape, preferably rectangular, is mounted upon a forward axle carrying supporting wheels, and upon two rear axles 12 and 13, which axles are preferably of angular construction, as shown in Figs. 1 and 2, and are secured to the ends of a cross-beam 14, located near the end of the bed and forming a portion thereof. The left-hand axle is so placed that the supporting wheel 15 mounted thereon will be quite close to the bed, while the right-hand axle 12 extends such a distance beyond the side of the bed that its supporting wheel 16 will be removed some distance from the bed, as shown in Fig. 1. The bed is preferably provided with two side rails 17 and 18, while the front and rear of the bed are unobstructed. Near what may be termed the rear end of the bed a pit or opening 19 is made, which may be covered when not required for use by means of a lid, and when the lid is in place it is preferably flush with the upper surface of the pit.

Within the pit or opening a hopper or chute 21 is secured, which inclines downwardly in direction of the right-hand side of the bed, the lower end of the hopper or chute being open, as shown in Fig. 3, and this chute is adapted to receive the grain or other material dumped and to deliver it to the ground, or to an elevator 22, of any construction, the bed being provided with horizontally projecting beams 23 and 24 at its right-hand side, between which the elevator may be secured or steadied.

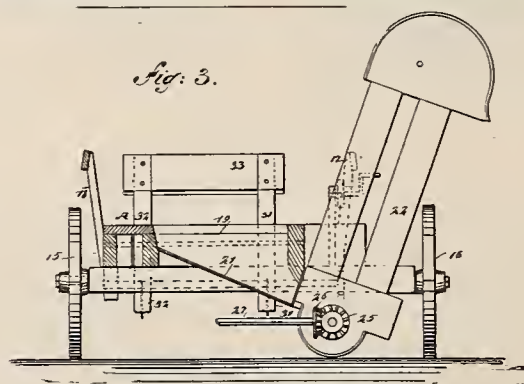
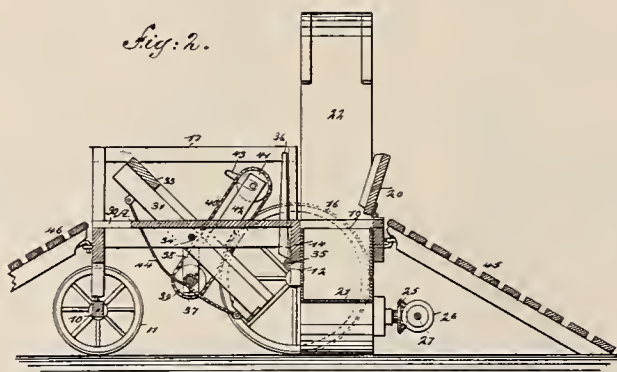
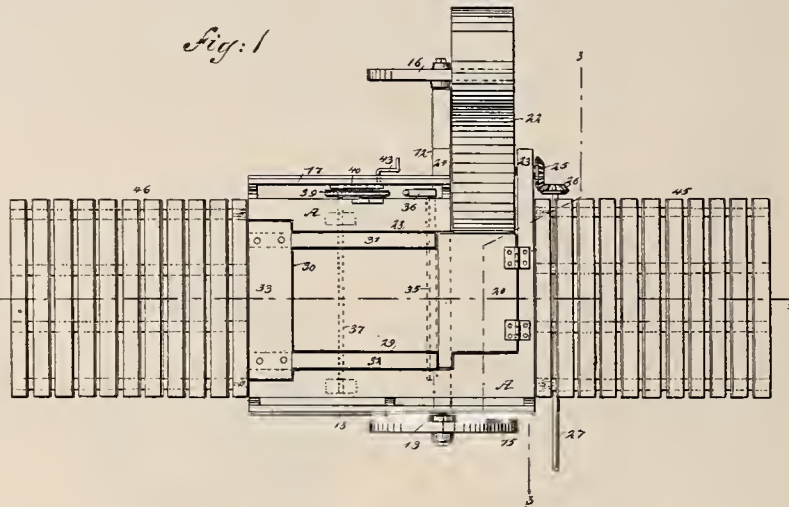
The elevator may be driven in any suitable manner. The elevating mechanism is shown as being driven by means of a beveled gear 25 attached to its lower drum shaft, meshing with a like gear 26 secured to a shaft 27 leading, as shown in Fig. 1, to the left-hand side of the machine, at which point the shaft may be turned by means of applied power.

In front of the cover over the hopper 21 are two longitudinal openings in the bed, one at each side of its center, 28 and 29. These openings at their forward ends intersect or lead into a transverse depression, also formed in the bed, but not extending entirely through it. Within each of the openings a balance or dumping beam is located, 31 and 32, and when they are in a horizontal position they are flush with the upper face of the bed; and at their forward ends the balance or dump beams are connected by a cross-bar 33, which, when the beams are in their horizontal position, fits neatly within the pit recess 30. Each beam is provided with an independent pivot pin 34, passing through it and through adjacent strengthening beams located upon the bottom of the bed, as shown in Fig. 2. When the dumping beams are in their horizontal position they may be so held by causing a lock bar 35 shown in positive lines in Fig. 2 and in dotted lines in Fig. 1, to engage with the rear ends of the beams at their under faces, the said locking bar being hinged upon one of the under beams of the bed, and it is moved to a vertical or practically to a horizontal position through the medium of a lever 36 secured to one end of the bar and located at the right-hand side of the machine. The lever usually extends upward between the bed and right-hand rail.

Beneath the central portion of the bed a shaft 37 is journaled in suitable hangers, and this shaft, ordinarily at its right-hand end, has secured upon it a sprocket wheel which is connected by a chain with a second sprocket wheel journaled in or upon a standard, which is projected upward from the right-hand side of the bed, usually in a rearwardly direction; and the shaft upon which the upper sprocket wheel is mounted is ordinarily provided with a crank arm whereby it may be rotated, and consequently a rotary movement will be imparted to the lower shaft, which may be termed a dumping shaft, as through the medium of this shaft the balance or dumping beams are

carried from a horizontal to an inclined position and vice versa; and this is accomplished through the medium of cables, which at one end are secured to the forward end of each dumping or balance beam and then coiled around the dumping shaft, and their opposite ends are attached to the rear ends of the same beams. Thus, by turning the crank 43 in one direction the chains will be so wound upon the dumping shaft as to carry the dumping beams from the horizontal position to the inclined or dumping position.

In the operation of this machine a loaded wagon is carried up one platform and is driven over the bed until the wheels of the wagon rest upon the dumping beams, the horses at the time being upon the opposite platform. The locking bar is then disengaged from the dumping beams and the crank is manipulated to carry the beams to a dumping position, whereupon the contents of the wagon will be spilled or dumped



into the hopper, the lid having been raised, and will pass from the hopper to the ground, or any receptacle placed to receive the load. The load having been dumped, the crank arm is manipulated in a reverse direction and the dumping beams are restored to their horizontal position and locked therein. The team and wagon may then be driven off down the platform upon which the team has been standing, making way for the next team which will come up the opposite platform.

This machine is constructed somewhat as a wagon, and may be readily transported from place to place, so that the grain may be elevated, for example, as it is dumped upon the machine, into the barn, crib or other structure in which it is to be stored, or may be readily transferred to another vehicle or car.

The Texas Experiment Station has reported that cottonseed meal is poor feed for hogs, often killing them. It is conjectured that either there is too much oil, the meal is raw or bits of hulls cause inflammation.

HAY DEALERS ORGANIZE A NATIONAL ASSOCIATION.

Hay dealers of the United States met in convention at Cleveland, Ohio, January 22, in the Chamber of Commerce. The meeting was notable as the first of its kind held in the United States. The attendance was large, there being about 180 receivers, shippers and dealers present, and a permanent organization was effected.

The meeting was called to order by W. J. Salter, chairman of the local committee. The meeting was addressed by Mayor Blee and W. M. Day, after which Mr. B. Mahler was elected temporary chairman and P. W. Pitt of Baltimore temporary secretary. Upon motion the chair appointed a committee of nine on credentials as follows: W. B. Harrison of St. Louis, H. W. Anderson of Baltimore, C. Hatcher of Tiffin, Ohio, Robert B. Tenney of Washington, D. C., A. D. Bahmer of Philadelphia, H. L. Houck of Pittsburgh, W. W. Granger Jr. of Cincinnati, J. A. Brubaker of Kansas City, G. S. Blakeslee of Chicago. A committee on organization was appointed and after deliberation recommended that officers of the association consist of president, three vice-presidents, and secretary and treasurer as follows: President, J. N. Wooliscroft, Cincinnati; first vice-president, Geo. W. C. Johnston, Pittsburg; second vice-president, Geo. S. Blakeslee, Chicago; third vice-president, E. L. Rogers, Philadelphia, and secretary and treasurer, P. W. Pitt, Baltimore. The committee also recommended that a permanent organization be formed under the name of the National Hay Association of the United States, and that a committee of fifteen be appointed to recommend grades of hay. The report was unanimously adopted with the exception that there be six vice-presidents instead of three. C. Hatcher of Tiffin, Ohio, F. D. Voris of Neoga, Ill., and B. Mahler of Cleveland were elected vice-presidents, all the officers to comprise the executive committee. The president addressed a few words to the association, and after a short recess the following gentlemen were named as a committee on inspection and grades: Wm. Hopps, Baltimore; F. D. Voris, Neoga; F. F. Favor, Boston; G. B. Bently, Albion, Mich.; W. S. Hoge, Washington, D. C.; C. Hatcher, Tiffin, Ohio; E. L. Rogers, Philadelphia; Wm. Affleck, New York; M. M. Freeman, Chicago; E. M. Fullington, Marysville, Ohio; Robert Thorn, Pittsburg; H. L. Early, Cincinnati; D. W. Clifton, St. Louis; John E. Hall, New Orleans; D. A. Baker, Fayette, Ohio. The convention received an invitation to meet in the Chamber for luncheon that evening and adjourned to meet the following day.

President Wooliscroft called the meeting to order on the 23d, and appointed a committee on transportation and car service. It being the sense of the meeting that the day of handling hay from track in the Eastern markets was past, it was

Resolved, That all railroad companies be urgently requested to furnish such terminal facilities or sheds that hay can be unloaded so it can be properly inspected or seen before being offered for sale. That a copy of this resolution be sent to the different transportation companies and freight lines operating with the East.

On motion of F. H. Jackson of Cleveland it was resolved to petition Congress and the House of Representatives, praying for the restoration of the duty on hay from \$2 to \$4 per ton. The main business of this session was the adoption of rules regulating inspection and grading, which are published elsewhere in this issue.

After deciding that the *Hay Trade Journal* be made the official paper of the association the meeting adjourned to meet on call of the president.

When the call room in the Board of Trade building was closed to them the traders in puts and calls "secured" a room in the Rialto building. Apparently the security was not a very firm one, as another removal was effected the very next day. The Rialto people did not want them, though it is understood that several bucket shops are tolerated. So the men who cannot endure life unless it be diversified by trading in privileges now are in abasement, in a double sense.—*Tribune, Chicago.*

A MOOTED POINT SETTLED.

A case that will prove of interest to the grain trade and especially to public elevator men has recently been before committees of the Duluth Board of Trade. During January and June, 1894, the Belt Line Elevator Company of Superior contracted to sell the Listman Milling Company 215,000 bushels of wheat, to be delivered in August or September, 1891, at the price of the May option. Sept. 13, 1894, the elevators having reduced the storage charges from $1\frac{1}{2}$ to $\frac{1}{2}$ cent, the Board of Trade adopted a rule providing that on all deliveries upon contract made for grain on and after that date the regular charge to follow such warehouse receipt should be $\frac{1}{2}$ cent. Subsequent to this the elevator company made its deliveries and demanded $1\frac{1}{2}$ cents charges. The purchaser conceded and paid only the reduced charge of $\frac{1}{2}$ cent, so that the difference was $\frac{1}{2}$ of a cent on 215,000 bushels of wheat, or \$1,612.

The Listman Company took the matter before the board of arbitration. The question to be decided was whether the contract really constituted a transfer. It was decided by the arbitration committee that the rule under which the case was tried should be construed as meaning that deliveries after its passage should be at the reduced rate which it established; that the rule covered trades made under contract prior to its passage; that the delivery, not the making of the contract, was the actual trade.

The Belt Line Elevator Company appealed its case, and the board of appeals reversed the decision of the board of arbitration, holding that the deal was under a special contract: that, though the rate did not appear in the contract, it was implied; that the making of the contract and not the delivery constituted the actual trade.

THE WASTEFUL SYSTEM OF HANDLING WHEAT IN CALIFORNIA.

There has been considerable discussion at one time and another upon the subject of the use of sacks in handling grain in this state, instead of the elevator system in use in all the other wheat-growing sections of the country, both in the Mississippi valley and the far Northwestern states, writes a correspondent of *Californian*. Various arguments have been advanced for the abandonment of this antiquated and necessarily expensive practice, but the present time affords two cogent reasons which do not appear to have been touched upon in the course of the argument.

One of these reasons is apparent to anyone with merely ordinary powers of observation who will take the trouble to pay a visit to Port Costa, where the bulk of the wheat crop of the state is put on shipboard for export. Here will be found many miles of side track upon which have been held for longer or shorter periods many thousands of cars loaded with wheat. These tracks will also be found to be almost literally ballasted with wheat for hundreds of feet. The bright grain lies in great patches and in continuous beds sometimes an inch or two in depth. It covers the space between the rails and lies in masses in the drainways between the various tracks. During a rain-storm recently I had occasion to pass through the place referred to and the waste of wheat that was noted in passing was simply appalling. How so large a quantity of grain could be thrown away does not seem apparent. Certainly no ordinary handling of the sacks while in transit could account for it.

But however it may have been caused, the loss is apparent to all, and is particularly of interest to the farmer who is called upon to bear it. It would be well worth the trouble of visiting the place, and a more powerful argument against the use of sacks could not be found than the mute one of the thousands of pounds of wasted wheat lying in and about the yards at Port Costa.

Still another argument is furnished in the damage that is often done to wheat which is left lying in the field or near the railroads in the interior awaiting shipment, which has been delayed because of the lack of cars for handling the unexpectedly large crop which has been harvested. Were not the sack system in uni-

versal use here, elevators would have to be provided by the railroad companies, as is done in all the Western states, and the grain would thus be held there secure from damage while awaiting shipment. All loss from bursting sacks would also be avoided, and there would be no such sights as that often presented at the Port Costa yards.

WILLIAM RICHMOND.

The American elevator system is the most complete in the world, and permits America to be a heavier handler and exporter of clean wheat than any other country. The facilities for receiving, cleaning and shipping grain are unexcelled. In grain cleaning machinery especially no other country can compare. Where good machines of American manufacture are not used one invariably finds machines planned after American ideas or designs modified more or less, but founded on machines brought out in America.

In the foremost ranks of the grain machinery business, the Richmond Manufacturing Company have been prominent for many years. In 1867 James Richmond commenced the manufacture of grain cleaning machinery at Lockport, N. Y. He had been engaged in milling from boyhood, and made a success of his milling and grain cleaning machines from the



WILLIAM RICHMOND.

first. He died in 1873 and was succeeded by his nephew, William Richmond, whose portrait is herewith presented.

William Richmond was born in England in 1847, and came to the United States when he was 16 years old. He, too, was a miller, but in February, 1868, went into business with his uncle. He was married in 1870, and has six children. Mr. Richmond carried on the business alone until 1881, when the company now known as the Richmond Manufacturing Company was organized, with William Richmond as president and general manager. The stock of the company was taken by five persons and is still held by them.

Mr. Richmond has been at the head of the company since its organization. He has devoted his entire time to the business; and the success of the Richmond machinery has been due in no small degree to the constant attention which he has given to the details of the business. The prosperous business left in his charge by his uncle has been largely increased under his management. Large additions have been made to the buildings and machinery and the number of machines manufactured and sold is about ten times the number annually that it was in 1873. During the past twenty years the company has acquired a number of patents relating to grain cleaning machinery, and while some of these have expired, quite a number covering valuable inventions have still a long time to run.

Personally, Mr. Richmond is an affable and courteous gentleman. He is one of the most unassuming of men, and though taking no active part in politics, has filled many offices in his city. He has been alderman, mayor, member of the board of education and water

commissioners, etc., and it has just been reported from New York that he has been appointed customs collector for the port of Buffalo. And the honors Mr. Richmond has received no one will doubt has been worthily bestowed.

ELEVATOR CHARGES AT BUFFALO.

It is our full desire to deal fairly, justly and reasonably with the elevators at Buffalo, at all times.

We are compelled to say, however, that defense of their charges as exacted at the close of navigation last year cannot be made. Seven-eighths of a cent a bushel for transferring grain in Buffalo is extortionate beyond any question. Argument piled on argument cannot change the fact. Ports with but a tithe of the business done in Buffalo are able and glad to transfer grain for one-half that charged at Buffalo. Where the business is largest the cost should be least. The reverse is the case. If, therefore, an increase of business is followed by an increased cost for transferring, something is radically wrong in the premises. It is known to all interested in the business that there are probably three, more likely four, elevators maintained, and paying large dividends, upon the operations of one. Year after year opposition elevators are built, and just as regularly they are merged with the others in one grand pool, or trust, and thereafter remain idle, but drawing a fine dividend. One of these days the trust will break of its own weight. Just one elevator, operating independently, is able to force the trust to reduce its charges below the point of profit. If the independent operator holds out for any considerable period, he causes an enormous loss to the combine, and the combine gladly buys him out in order to restore full rates. What occurred last year, in the way of independent elevators, is likely to occur next year, or at least the year after. The maintenance of an unlawful and unjustifiable charge for transferring grain is bound in the end to be disastrous—and disaster to the trust is inevitable, we believe. Disaster to the trust means relief to the grain trade. By virtue of its incomparable situation, its vast network of railroads radiating to all of the seaports of the Atlantic, and, above all, the great Erie Canal, Buffalo is able to command the larger part of the grain trade—will, doubtless, for years to come. It is this situation which enables the elevators to charge seven-eighths of a cent a bushel for transferring grain, when the law permits them to charge but five-eighths. To be sure this charge includes ten days' storage, but equally true is it that the elevator trust refuses to receive grain for direct transfer at any reduction from the seven-eighths of a cent a bushel transfer charge. During the season of navigation on the great lakes last year millions of bushels of grain came to Buffalo from Chicago at a less rate for transportation, occupying three, four and five days' time, than was charged for five or six hours' time occupied in transferring it. For weeks and weeks lake steamships each carried 100,000 bushels of grain from Chicago to Buffalo for \$750, as we say, occupying three or four days on the passage, and the same grain paid \$875 for its transfer, the latter occupying five hours, to which must be added the time occupied by the steamship in making fast to the elevator, getting ready to begin operations and getting away—but two hours is ample allowance for that service—thus making a total of seven hours for an elevator to earn what a steamship requires at least four days to earn.

From the point of view of the members of the trust, it is of course easy for them to maintain that the charges they exact are necessary to earn a profit upon the property embraced, but it is no justification for them to maintain forty elevators, probably, out of sixty, in idleness, in order that they may maintain a charge which the courts have declared to be illegal. It cannot be contended that the maximum grain receipts at Buffalo ever taxed even one-half of the elevator capacity, nor can it be maintained that even one-half of the elevators are in a condition to be operated—they have become useless because their equipment is old-fashioned and decrepit, and should long ago have been thrown into an ash heap or rebuilt.—*Canal Defender*.

Send us the grain news of your district.



[We invite correspondence from everyone in any way interested in the grain trade, or all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

HAS HOUSE FULL OF GRAIN.

Editor American Elevator and Grain Trade:—We have just finished a 10,000-bushel crib fitted with Kurtz & Son's Elevator Dump. We now have our 110,000-bushel plant full of grain, and expect to have to build more room yet, as our business still grows.

Yours truly,
SUMNER & SON.
Milford, Ill.

SHIPPING AT TACOMA.

Editor American Elevator and Grain Trade:—According to the report of the harbor-master of the port of Tacoma, Wash., for the month of January, the total exportation of breadstuffs was as follows: Wheat, foreign, 291,895 bushels, valued at \$133,390; wheat, coastwise, 307,533 bushels, valued at \$123,013.20; flour, 33,807 barrels, valued at \$78,214. The inward registered tonnage was 43,154 tons, outward registered tonnage 37,090 tons.

SAMUEL COLLYER,

Secretary the Tacoma Chamber of Commerce.
Tacoma, Wash.

FORMED PARTNERSHIP.

Editor American Elevator and Grain Trade:—J. K. Campbell, who has for some time been doing a large business in grain, seeds, flour and feed, besides dealing in coal and salt, at Lewisburg, Ohio, has taken a partner in his business, and the new firm is known as Campbell & Pierce. The company owns and operates elevators at Lewisburg and Castine, Ohio. Mr. Chas. T. Pierce was formerly manager at the Lewisburg elevator before entering into partnership with Mr. Campbell. He is an efficient elevator man, well posted in the grain business.

OHIO.

IS NOT AN IDOL BREAKER.

Editor American Elevator and Grain Trade:—I wish to express myself as one who is not in favor of the so-called golden motto, "grain should be bought and sold by the hundred pounds," the advantages of which motto were set forth in an article in the last number of the AMERICAN ELEVATOR AND GRAIN TRADE. I fear I run the risk of being thought too conservative and to be charged with clinging with too much persistency to the methods of our daddies, but I see also disadvantages as well as advantages in a change from the present system. Our present method of buying and selling to me is good enough. All our grain tables, some of which are very elaborate and have required a large amount of expense and careful study in their compilation, are founded upon this system. They are very accurate, are time and labor saving, and by their use business transactions can be computed rapidly and accurately. They are a saving of brain power as well and the arrangement of our tables is so admirably planned that the reckoning of any amount of any kind of grain at any price becomes an easy and simple matter. I do not believe that any change from our present plan would make matters any simpler.

Barley, rye, oats, corn, and even wheat to some extent, are malted. This product is invariably sold by the bushel. In respect to these grains, then, our present mode of buying and selling would have to be retained. Should we endeavor to make a change and succeed only in part, as the case might be, how much more complicated our system would become than it is now. If the multiplicity of standard measures is confusing would it not grow more confusing? While I think our present system is bad enough we should not overlook the fact that it might be worse. With our systems of grain tables carefully elaborated and our thorough knowledge of our present mode of transacting

business in grain, perhaps it would be as well to be satisfied with our present ills rather than run the risk of meeting those of which we know nothing.

Very respectfully,
ARGENTINE.

EXPERIENCE OF A DISSATISFIED FARMER.

Editor American Elevator and Grain Trade:—In your issue of January 15 I notice a rather amusing "wail against the consignee," written by someone who seems to have had very unsatisfactory experiences—none of which he relates, however. If the writer had been more explicit in his condemnation of the consignee he might have brought out some point to be looked into, but as it is he has wasted a good deal of ammunition in a general kick-up.

There seems to be a general opinion among grain growers that they are being outrageously swindled by the middlemen whose business it is to handle their grain. There's a farmer here in Washington who has no faith in the commission man, and having more enterprise than brains he determined to test the matter.

Not long ago he took 20,000 bushels of wheat to Walla Walla, where he found the buyers paying only 25 cents per bushel. He disposed of 10,000 bushels at that price, and took the remainder to Portland, where he was offered 40 cents per bushel. He had paid 15 cents per bushel for transportation, and decided there was a combination of grain men trying to get the best of him. Mr. Farmer then set his teeth and paid 24 cents per bushel to have his grain shipped to Liverpool. Here the grain was sold at a price that netted him just 25 cents per bushel, the exact price he was offered by Walla Walla buyers.

I would suggest a similar experiment by anyone who is dissatisfied with his profits and imagines that everyone who handles his grain in the course of business is squeezing all the profit out of it. It may and may not prove costly, but it will put an end to wails against buyers and consignees.

A. B. SAYER.

THE DESIRED EXPLANATION OF "S. B."

Editor American Elevator and Grain Trade:—My attention being attracted to a letter in your January issue under the head of "An Explanation Desired," signed "Maguire & Co., Cincinnati, Ohio," relative to blowing and screening grain received at this elevator, and as said letter seriously and injuriously reflects upon the honesty of our management, I beg the liberty of replying to the unjust accusation of Messrs. Maguire & Co. through the columns of your valuable journal. For the benefit of those in the grain trade who have not had any experience with our company or its methods, and who might be prejudiced against us, I will say that with the large number of grain shippers whose grain we handle year after year we require no vindication.

I will preface my reply by saying that I am not personally acquainted with Messrs. Maguire & Co., and, looking over our correspondence file for some months past, I find that we have received but one letter from that firm on any subject, and that one was addressed to our inspector in chief. We quote that letter and our reply to same, as follows:

CINCINNATI, Ohio, Jan. 15, 1895.

C. B. Tyler, Esq., Inspector in Chief, Newport News, Va.

DEAR SIR:—Please let us know by return mail if the weights of car 25106 C. C. C. & St. L., your certificate dated Jan. 10, 1895, is gross weight, 566 bushels and 04 pounds, or has 2 bushels and 38 pounds been deducted to make the grade?

What we want to get at, is, how much corn was in the car on arrival before it was subjected to the loss of 2 bushels and 38 pounds?

Your prompt attention will very much oblige,

Yours very truly,

[Signed.]

MAGUIRE & CO.

I replied to the foregoing as follows:

NEWPORT NEWS, Va., Jan. 17, 1895.

Messrs. Maguire & Co., Room 11 Chamber of Commerce, Cincinnati, Ohio.

DEAR SIR:—Acknowledging receipt of your favor of the 15th inst., and answering your inquiry relative to weight of car C. C. C. & St. L. 25106, our certificate dated Jan. 10, 1895, beg to say that the weight of the grain ex this car was 568.42 bushels; the grade on receipt being No. 3 Mixed, owing to being soft and rather dirty, we blew and screened the car at a loss of 2.38 bushels in weight, and were then able to give it

the next grade above, that is, Steamer Mixed, the net weight after blowing and screening being 566.06 bushels.

Trusting above will be satisfactory, I am,

Yours very truly,

[Signed.]

W. S. UPSHUR, Agent.

The same reason for screening and blowing would apply to any other cars subjected to that process.

Now we submit that the above letter in answer to letter of Messrs. Maguire & Co. is as fully explanatory of our position as though we had written a volume on the subject, and should have been entirely satisfactory to any unprejudiced person. You will note that the particular car referred to arrived here containing 568.42 bushels of corn, which, inspected on its merits, would have graded No. 3, being soft and dirty. Having the interest of the shipper well in mind, we blew and screened the corn at a loss in weight of 2.38 bushels, and were thereby enabled to give grade on whole quantity (less the 2.38 bushels' loss in screening and blowing) of Steamer Mixed. The advantage to shipper through our action is obvious. Referring to the "Price Current" of the *Baltimore Daily Produce Report* of Jan. 10, 1895, the day on which this car was elevated, we find that Steamer Mixed corn is quoted at 46½ to 46¾ cents per bushel, while No. 3 Corn is quoted at 45½ cents per bushel, the market being at least 1 cent per bushel in favor of Steamer Mixed over No. 3; therefore, by raising the grade of this car to Steamer Mixed we saved Maguire & Co. 1 cent per bushel on 566.04 bushels.....\$5.66
Less value of the 2.38 bushels No. 3 Corn blown out, at 45½ cents..... 1.09

Showing balance saved to them.....\$4.57

And we charged them nothing for blowing and screening, though the usual charge for that service is, as per our printed schedule of tolls, ½ cent per bushel.

The "mysterious letters, 'S. & B. Soft,'" with quantity lost following, is entered upon our weight slips in order to show the shipper that his car had originally weighed the quantity lost through blowing and screening in addition to the net weight returned, and also would clearly indicate to the average shipper that the process of blowing and screening was resorted to in order to give his car of grain the grade it finally attained.

The above is, I think, a full explanation of the "gouge and imposition" practiced by this elevator company. Our present system, instead of being a new departure, as asserted by Messrs. Maguire & Co., has been in effect for the last four years.

We are glad to be able, in refuting the charge of Messrs. Maguire & Co., to demonstrate to the many readers of the AMERICAN ELEVATOR AND GRAIN TRADE how thoroughly the Chesapeake & Ohio Grain Elevator Company maintains its principle of standing strictly in the middle between shipper and buyer, playing no favorites on either side.

Yours very truly, W. S. UPSHUR,

Agent C. & O. Grain Elevator Company.

Newport News, Va.

ELEVATORS PLANNED AT HOME AND ERECTED BY BARN BUILDERS.

Editor American Elevator and Grain Trade:—On page 248 of your January issue we notice an inquiry as to why it is necessary or desirable for an intending builder to employ a party specially for the purpose in building an elevator. It seems as though any good workman would be competent to undertake apparently so simple a job.

In order to illustrate the point we would ask this inquirer to take the illustration on page 251 to some workman, whom he knows is competent, and ask him to give the proper dimensions of all the parts shown in this illustration as applied to the one he will want to build. He will want the size and kind of wheel, the size of shaft, thickness of belt and kind, size of cups and distance apart on belt, width of legs, size and shape of delivery spouts, velocity of pulley, manner of supporting this pulley and proper connection with power. If he will remember then that these calculations must all be made to harmonize with what is to be run in connection with it and to make proper allowance for any incidental changes that from other causes may become necessary; that calculations of almost equal moment are necessary in properly constructing the boot, and that this is only the smallest

part in the proper planning of an elevator, he can begin to see why it might under some circumstances be a good thing to have his elevator planned by someone having a knowledge of how things should be.

He could also appreciate it better if, after having put up his elevator, he had so planned it that he would be compelled to constantly hire an extra hand to do work that was rendered necessary all the time by faulty construction. Suppose, for instance, that he would be compelled to pay from 25 cents to 50 cents for a man in loading each car when it would have been just as well to have it so arranged as to cost nothing at all.

Then too it would probably be an eye-opener if he could be shown an old elevator that had been pulled all to pieces by the very rods put in to hold it together. There are so many things that could be said in this connection that it is hardly necessary to begin with them. The fact is that a very large number of elevators have been built just in the way he suggests building.

If he could stand in an old elevator and hear the grain rattle down the leg back into the boot, and be told that if the delivery at the head had been arranged three inches differently all the grain he heard falling back into the boot would be going into its proper place in the car or bin, he could readily calculate that the three inches might at that very time be costing the operator of that elevator from \$1 to \$5 per day. Then, possibly, he might feel that a little extra expense in employing somebody who knew how to build might not be amiss.

Very truly yours,

X.

OUR BOSTON LETTER.

Editor American Elevator and Grain Trade:—We have had quite a good trading market the last ten days. Prices have fluctuated often and it has led to business. The country is buying on advances, which seems to prove that the country dealers are only waiting for some sign of stiffness in the market to commence stocking up, for most of them are running with light stocks. Feed is scarce and high compared with grain. Cottonseed meal was never so low, and it is selling less than St. Louis bran. The low price of this product is caused by small mills in Texas throwing their meal on the market to obtain funds regardless of price.

Receipts and exports for the month of January, 1895, as compared with those of the same time in the preceding year, were as follows:

RECEIPTS FOR JANUARY.

Articles.	1895.	1894.
Cotton Seed Meal, tons.....	1,277	291
Corn, bushels.....	440,886	1,327,529
Wheat, bushels.....	390,540	317,089
Oats, bushels.....	423,149	772,167
Rye, bushels.....	530	8,350
Mill Feed, tons.....	1,202	2,489
Oatmeal, sacks.....	5,900	4,320
Oatmeal, barrels.....	1,774	5,476
Cornmeal, barrels.....	4,610	7,632
Malt, bushels.....	68,365	97,649
Barley, bushels.....	21,804	49,490
Hops, bales.....	2,526	549
Peas, bushels.....	5,018	6,225
Buckwheat, bushels.....	1,455	.....
Flour, barrels.....	76,937	140,273
Flour, sacks.....	114,449	119,122
Hay, cars.....	1,710	1,866
Straw, cars.....	89	91

EXPORTS FOR JANUARY.

Articles.	1895.	1894.
Wheat, bushels.....	756,961	598,872
Corn, bushels.....	58,455	477,844
Oats, bushels.....	1,688	920
Peas, bushels.....	600	2,481
Barley, bushels.....	30,157	.....
Buckwheat, bushels.....	.....	.....
Cornmeal, barrels.....	3,219	5,352
Oatmeal, barrels.....	420	1,245
Oatmeal, sacks.....	8,357	6,716
Flour, sacks.....	216,630	197,870
Flour, barrels.....	12,131	34,730
Mill Feed, bags.....	4,730	6,104
Hay, bales.....	19,336	89,078
Straw, bales.....	.....	.....

The grain elevator and mill at Williamstown, Mass., belonging to W. M. Hodge & Co., was destroyed by fire January 14. Loss about \$23,000; insurance \$14,600.

The elevator and mill of Geo. S. Murdrie, Calais, Me., was burned February 5, together with 1,000

bushels of corn and a quantity of oats. Loss \$5,000; insurance \$2,000.

The firm of Morrill & Brown, Laconia, N. H., was dissolved January 10, G. G. Brown retiring. J. S. Morrill continues the business.

J. E. Tibbetts of J. E. Tibbetts & Co., Auburn, Me., died February 1. His son, Mr. Norris S. Tibbetts, who has been associated in the business with his father, will continue it under the old firm name.

E. W. Pierce, hay and grain dealer at Lawrence, Mass., has assigned. BUNKER HILL.

WHEAT TO LIVERPOOL VIA THE ISTHMUS.

Peavey & Co. of Minneapolis are making an interesting experiment in shipping wheat from San Francisco to Liverpool via the Panama Railroad, the shipment having left the Pacific Coast January 15, and it will be due in Liverpool in four weeks from that date. The story of this experimental shipment really begins with investigation commenced three years ago. It was then that Peavey & Co. conceived the idea that if wheat could be shipped via Panama, there might be business reasons why it should be entered upon. In line with the aggressive policy of the company, a man was sent from Minneapolis to Panama two years ago to make careful investigation of the facilities there for wheat handling, transferring to cars and reloading on ship, with expense itemized, etc. The results were not entirely satisfactory, but the plan was never dropped, and on the 15th of January a trial shipment was started from San Francisco by steamer. The wheat is in sacks. When Panama is reached it will be loaded in bulk on cars, just as it is shipped in the Northwest, and the run will be made across the isthmus to Colon, where the wheat will again be sacked and loaded on vessel for Liverpool. The trip is to consume 30 days, which will be a great saving of time over Cape Horn shipment, as wheat shipped to Europe via the Cape has to go in sailing vessels, on account of the inability of steam vessels to take on coal. This makes the trip a long one.

The principal question at issue in the Peavey shipment is whether the wheat will keep well in transit. If this proves satisfactory the results to the Pacific Coast may be important, for it is well understood that large financial resources enable Peavey & Co. to engage in large enterprises that have profit back of them. The outcome of the experiment will be awaited with interest by the grain trade. The wheat being forwarded is from the company's Oregon elevators.

WANT CARRIERS TO FURNISH STORAGE FOR GRAIN.

The Grain Dealers' Association of Central Illinois memorialized the Illinois Railroad and Warehouse Commission, January 25, as follows:

We, the grain dealers of Central Illinois, represented by a committee selected by them, would respectfully represent to you that in your revision of state tariffs you adjust your tariffs so that the railroad companies be either required to furnish freight storage for grain as they are required for other articles for shipment or compensate shippers of grain for storage of same. The railroad companies are required by law to furnish storage for all other commodities except grain; their chief source of revenue is from shipments of grain, yet with this immense revenue and high rate of freights the shippers of grain are compelled to build their own storage houses without any compensation. We would respectfully suggest that in your revision of tariffs you require the railroad companies to either furnish storage for grain or compensate the grain dealers for storage capacity furnished at their own expense for the convenience and profit of the railroad companies.

The memorial is signed by Theodore R. Baxter of Taylorville, B. S. Tyler of Decatur, Thomas Costello of Maroa, E. M. Pratt, E. R. Ulrich & Son and C. O. Matheny & Co., all of Springfield, who constitute the committee. The matter was discussed by the committee and the commissioners quite fully, and Chairman Cantrell announced that he did not think the commission had power, under the law, to do what it was asked to. However, he would hold the matter open, and afford the dealers further opportunity to convince the commission that its present view was not the correct one.

Queries and Replies.

Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.

No. 11. Who is Responsible?—A subscriber of the *Montreal Trade Bulletin* asks the following: "In the case of shippers sending grain to the United States and making sight drafts thereon with bills of lading attached, which means demand drafts in that country, if the bank does not get payment within ten days after presentation, should the consignor be held responsible in the event of the market declining and the consignee not accepting draft and no advice from the bank to the contrary? In that case who should be held responsible?"—XXXX.

GRAIN BUSINESS POOR IN SOUTH DAKOTA.

A Winona, Minn., correspondent of the *Cincinnati Price Current* writes, under the date of January 19: We are operating 100 elevators on the line of the C. & N. W. R. R. west of here to the Missouri, on all its divisions. The crop in our territory, that is from Tracy, Minn., west to the Missouri, has been very disastrous this year, and up to January 1 we were compelled to close up 67 of our elevators, as there is not enough coming to pay half of the expenses. We see that some statisticians were figuring the crop of South Dakota to be 15,000,000 to 16,000,000 bushels, while I make it less than 8,000,000, judging from what we have received, and what such firms as Van Dusen & Co., Marfield & Co., and the rest of our competitors, have been getting. The farmers in these sections are destitute, and the county commissioners have already approached us for seed wheat, showing that the farmers not only have not enough wheat for bread, but they are also short for seed wheat, so that the surplus in the farmers' hands is practically nothing. Thirty-three of our elevators, mostly located in Minnesota, are not receiving anything at present, and judging from what our agents say what little will come in will be marketed after seeding time.

A good deal of wheat is fed to hogs and cattle, and from what I could find out in Winona county there must be from 50 to 60 per cent. ground up and fed. The farmers here are feeding their wheat and keeping their oats, as they think they will get a better price for the latter; and as it is in Winona county, so it is also in counties from here west to the Dakota line. We have a small mill in South Dakota, and we are grinding a good deal of wheat as feed for farmers; besides we are not making any flour below the patent, as feed is very scarce there.

A year ago, from January 1 to August 1, we shipped to Minneapolis about 1,000,000 bushels of wheat. This year we shall not ship a single bushel, as the wheat that we have on our line is contracted for by millers, and in the far West it is reserved for the county commissioners for seed. What is true of our companies is also true of such other elevator lines as I have mentioned, so the shipments to terminal markets will be nothing from us. The same is true of the Hastings & Dakota division of the M. & St. P. R. R., also the Southern Minnesota, of the M. & St. P. R. R. and the St. Louis R. R. These roads run parallel with ours.

I firmly believe that the farmers of South Dakota will not have enough for seed, and that the percentage there is nothing, while in our territory in Western Minnesota, beginning with Mankato to the Dakota line, not more than 18 to 20 per cent. is in farmers' hands.

In Winona county and 50 miles west of here farmers did not put in one-fourth as much winter wheat as they did last year: the acreage is reserved for barley and oats.

The annual report of the Buffalo, N. Y., grain inspector states that the total quantity of grain inspected during 1894 was 13,382 cars on track, 9,367 cars out of store, 14,698,691 bushels into elevators, and 2,902,058 bushels out of elevators. Chief Inspector Conway W. Ball, after paying all salaries attached to his department, paid to the Buffalo Merchants' Exchange the sum of \$1,403.

HANDLING COARSE GRAINS AT DULUTH.

It is not extravagant to say that the receipts of coarse grains at this market during the next crop year will increase 100 per cent. over the total for the crop year now current, says the *Commercial Record*. Corn has entered the situation this year, but not as a factor. It would be too prophetic to say that it will attain that distinction next year, but it will have become a more conspicuous commodity. In some inexplicable manner an impression has got out that corn cannot be handled in this market for the reason, it is given, that a lot of 300,000 bushels carried over winter in one of the warehouses several years ago was ruined by overheating, and the loss was charged to the climate. This story proves, on pretty thorough inquiry, to be pure fiction. No corn has ever suffered here. As to this point there seems to be no room for question. Elevator men and traders of long experience in this market unite in agreeing that there never has been any trouble on that score, and that there can possibly be none.

But it is in barley, rye and oats that this market will make the greatest gain next year. The larger proportion of the corn raised in North and South Dakota, especially in the latter state, will be held in farmers' hands for seed another year. It is not likely, therefore, to become any considerable factor here next year. But wherever crops failed utterly or partially last summer, farmers, according to very full reports, will put in only as much wheat as they will need for flour and for feeding purposes should their corn be nipped by early frosts. They will go into barley, flax and rye on a large scale. During the last full crop year the receipts of barley in this market increased over 600 per cent. over the year before, and oats in nearly the same ratio.

CINCINNATI RECEIVERS ORGANIZE AGAINST AN IMPOSITION.

A number of grain commission men of Cincinnati met in the office of J. N. Wooliscroft, January 15, to talk over the giving of credit to local buyers. The feeling against the imposition has been gaining strength for some time. It has been found by the local grain men that when they secure shipments of grain from outside parties they are compelled to remit payment therefor, and upon its transfer to local buyers they are compelled to wait for settlements for a time much longer than they consider convenient. At the meeting means were discussed for remedying this long-payment plan. The meeting was adjourned to the next day to further consider the matter and present it to the trade.

Definite action was finally taken as is outlined in the following from Mr. Wooliscroft:

"In regard to the definite action taken by the grain commission men of this city relative to protection against long time credit on consigned grain sold to local dealers, I would state that we formed ourselves, that is the grain commission men of Cincinnati, 16 of them, embodying the largest receivers of grain and hay as well as feed in this market, under the name of the Grain, Hay and Feed Association. The object of said Association being for our mutual protection against those buyers who buy for cash and pay for their grain, hay or feed when it suits their convenience. The Association is duly formed and it is now in good working order.

"The rules incumbent on those who are members of said Association are that within 48 hours, if those parties to whom they have sold have not paid their bills, meaning by that within 48 hours after the receipt of the bill for the grain, hay or feed they have bought, the secretary of the Association is duly notified and the word is passed around to the members of the Association that such a party is in arrears. He will therefore, meaning the party who has not paid his bill within the prescribed time, be debarred from further purchases until his bill is settled. A sum of \$50 is placed with the treasurer as a guarantee of good faith.

"Although the Association has not been organized more than two weeks, it is working nicely and is accomplishing the end for which it was formed. The

grain receivers of Cincinnati have for some time been compelled to cater to a certain class of trade incident not only to this market but to every other market, the members of which seem to think they can take their own time in the payment of their bills. The business got into such a condition that for the mutual protection of the largest grain receivers of Cincinnati this Association was formed."

DECIDE AGAINST THE PUBLIC ELEVATOR MEN.

The public elevator men of Illinois who deal in grain stored in their own houses have been dealt a hard blow by the Railroad and Warehouse Commission. Last July a member of the Board of Trade after failing to get a reply from the commission as to the legality of the practice indulged in by the elevator men, wrote to the Governor and he handed the following question to the commission for a reply:

Have the warehousemen the right to handle their own grain through the same houses and with the grain of their customers, or does the law contemplate that they shall act as custodians or trustees and handle only the grain of third persons under the system as laid out in the railroad and warehouse law of this state?

After fully considering the question the commission gave the following reply:

At common law a warehouseman exercises a mere private employment, but under our statute he becomes a quasi-public officer. Before transacting any business in his warehouse he is required to obtain a license from the proper authority and to give a bond for the faithful discharge of his duties. This becomes necessary because he is dealing with the public in his quasi-official character, and that the public may be protected from loss from any cause. He is allowed to charge the public for the use of his warehouse; he must publish each year in one or more newspapers a table or schedule of rates charged by him for the storage of grain in his warehouse, which cannot be increased during the year; he shall not mix grain of different grades together or select different qualities of the same grade for the purpose of storing the same, nor shall he attempt to deliver grain of one grade for another, or in any way tamper with grain while in his possession or custody with a view of securing any profit to himself or any other person. He shall not discriminate between persons desiring to avail themselves of warehouse facilities, but he shall receive for storage any grain that may be tendered him in the usual manner in which warehouses are accustomed to receive the same. He is required to issue a warehouse receipt to parties storing grain, which receipt is, as the Supreme Court has held, a contract of bailment, the warehouseman thereby becoming the mere bailee or custodian for the owner. Continuing the court says: "The fact that the warehouse is a public warehouse is of itself notice to the world that the grain therein stored is held not for the warehouseman but for others." The warehouse act was passed in 1871 immediately after the adoption of the new constitution, and was, to use the language of Chief Justice Dreese in the case of Mann vs. The People, to protect producers and shippers against exorbitant charges on the part of warehousemen, against unjust discrimination, and against all species of fraud which the warehouseman might be guilty of. The statute requiring the warehouseman to receive grain for storage does not mean that he shall receive his own grain from himself, but the definition of the word received means the act of taking. From whom? From oneself? Certainly not, but from a third person. Therefore the construction of this word receive in our opinion can only mean that article or thing taken from a third person. While the statute permits the warehouseman to mix the grain of the same grade and of different owners, in my opinion the proper construction of this statute is that it applies only to the grain of third parties and not to his own grain. If a warehouseman desired to handle his own grain he can do so without taking out a license or giving bond, but when he elects to become a public warehouseman he can only handle the grain of the public.

Inasmuch, however, as it has taken seven months to get an expression of opinion from the commissioners on the law the anti-elevator men are justified in assuming that they will not voluntarily take up the matter of disciplining warehousemen who may be violating the law. The decision gives the directory a basis on which to work. Complaints may now be lodged with the proper authorities, and if necessary a legal decision obtained as to the constitutionality of the law and as to its construction. The anti-elevator people have made all preparations for the next step and have sufficient evidence, as they think, to prove that several of the most prominent elevator people have been grossly violating the warehouse law.

CHAFF.

Mr. F. Schumacher, president of the American Cereal Company, is reported to be long over 3,000,000 bushels of oats, on which he has put up about \$60,000 in margins.

The country elevator man who grinds feed is not worrying about getting business this season, but it does worry him to take care of that which comes to his elevator.

Farmers of Eastern Washington are about to petition the legislature for relief from what they consider unjust exactions on the part of the railroads regarding grain tariffs.

It is reported that the all-rail lines will attempt to compete with rail and lake lines for the grain and flour carrying business from the Northwest to the coast next season.

A bill has been introduced in Congress to raise the duty on barley to 30 cents and on malt to 45 cents, the duty imposed by the McKinley act. It is designed to annihilate Russian enterprise.

In order that a uniform grading of hay for all points alike be effective, shippers and receivers must not judge their hay one a grade above and the other a grade below its actual quality.

The Canadian Pacific Railway has agreed to carry seed grain at half the scheduled rates. Station agents are supplied with samples of good seed, and only grain equal to the sample is thus favored.

Barley malt aggregating 10,980 bushels, valued at \$8,173, was imported during the twelve months ending with December, against 2,489 bushels, valued at \$3,056, imported during the corresponding months of the year preceding.

Corn similar to that which took first premium at the Chicago Exposition is still growing in Georgia. Some ears were recently exhibited which measured 11 inches in length, 8 to 9½ inches in circumference and 1½ inches across the bare cob.

There is a movement in Kansas looking toward the growing of Kaffir corn. P. H. Albright has shipped in a carload which he will sell to the farmers at cost. He thinks that this corn will withstand the drouths so prevalent and so disastrous to the ordinary corn.

Railroads have agreed to a reduction in grain and flour rates from St. Paul to Chicago, and the rate from Chicago to New York is placed at 20 cents. Railroads have practically agreed to prorate on this basis, though there has been considerable opposition.

Speaking of Chicago as a market, *Hay There* says that hay is unloaded on the track with the broad heavens for a roof and the whole world for a warehouse. Despite the importance of Chicago as a hay market, it gets but small consideration from the railroads.

It is a good idea for the elevator man to keep his machines in repair. This is the way a certain hay man keeps his presses in order: Every time a part breaks he has a new part, made of much better material, put in. The strength of a chain lies in its weakest link.

Extensive flax cultivation in Washington may begin next summer. The Portland Linseed Oil Works offers to make contracts with farmers who will agree to put in 2,000 acres, paying \$1.65 per 100 pounds on board cars at Portland. That is only one indication of the general trend.

The qualifications for membership in the National Hay Association are thus set down: "All persons of good repute engaged in shipping or dealing in hay are eligible to become members of this association, upon being elected by the executive board, and upon payment of two dollars (\$2.00) for annual dues."

As month succeeds month we hear of little depression on account of deliveries. In these days of money loaners seeking safe investments, they find the best gilt-edged collaterals in registered elevator receipts. The competition for them makes it easy to secure cash at very low rates to carry the grain. The security is next to government bonds, which will naturally incline the situation to larger stocks in the future than in the past.

EXPERIENCE WITH AMERICAN ELEVATORS IN RUSSIA.

BY ALFRED F. BENDER, ENGINEER, ST. PETERSBURG.

In compliance with the state council's decision, most graciously sanctioned by His Majesty, on July 8, 1889, the Riasan-Kozloff Railroad Company (now bearing the title of Riasan-Malok Railroad Company) erected four elevators, one at Kozloff, Lebedyan, Dankoff and Riashsk, to each of which there were new tracks constructed. The elevators were completed in 1890. At first they received ungraded grain to be stored separately, but later on, when grain inspection was established and grain classification introduced (for wheat, rye and oats only), a uniform grading system with a view to allowing the grain to lose its identity was made obligatory for the above kinds of grain at Kozloff since Nov. 5, 1891, and at the other three elevators since Feb. 1, 1893.

That grain might be properly assorted and classified quite a number of standard grades were created.

There are 17 for wheat, 9 for rye and 26 for oats. The grading was based on the nature of the grain, the weight of one chetvert (of 5.9567 bushels each) in poods (of about 36 pounds each) and the percentage of impurities. All other kinds and varieties of grain, such as barley, oleiferous seeds, etc., on account of their being tendered only in small quantities, are not subject to any grading operation and can be stored separately. Article 3 of the rules and regulations of the elevators provides that the "grain subject to grading shall be received from all comers alike and in any quantity desired," while such grain as is not intended for mixing with grain of other shipments or is to be kept separately is received only in shipments of uniform condition as to quality and in quantities not exceeding the capacity of one bin, and that only in case of the free room not being preserved for graded grain. And in case of impossibility to comply with all requests for storage, for want of room to spare (which circumstance has, however, never occurred) the preference will be given to such oats or rye shipments as are intended for comparatively shorter keeping than the rest.

Of these elevators those at Kozloff and Riashsk are the largest. They each have 48 bins and can store more than 33,300 chetverts (180,000 bushels) at a time, the storage capacity of each bin being more than 5,500 poods, with 10 per cent. surplus of room. The working (receiving or handling) capacity is 2,400 poods of grain per hour. The elevators at Dankoff and Lobedyan are the same as the others in size and shape, but are smaller, their storage capacity being 200,000 poods of rye each, or 22,200 chetverts of grain, with 10 per cent. surplus room. They both have 32 bins of 5,500 poods' capacity each, and a working capacity of 1,200 poods per hour.

These elevators were contracted for and constructed by the Briansky Rail and Iron Works Company, contractors, the same concern that built the first Russian elevator at Yeletz, all of them being run by steam. The cost of the four elevators at the time of construction was 379,000 rubles; the ones at Kozloff and Riashsk cost 109,000 rubles each; those at Dankoff and Lobedyan 80,500 rubles each. They began operations in 1890, but worked only a short time and did

little business. In 1891 they received 1,062,738 poods 34 pounds of grain, shipping 629,657 poods 17 pounds; in 1892 they received 2,052,288 poods 7 pounds, and shipped 1,776,724 poods 27 pounds. There remained in stock Jan. 1, 1892, 433,081 poods 17 pounds, on Jan. 1, 1893, 708,644 poods 37 pounds.

During these two years none of the elevators was in full operation and none worked to its full capacity. Until Jan. 1, 1892, there was only about .4 of the full storage capacity, and until Jan. 1, 1893, about .7 occupied by grain. The aggregate working capacity being, as already said, 7,200 poods per hour, the total output of all the elevators ought to be nearly 23,760,000 poods per hour. In reality, it was, in 1891, only one-thirty-eighth, and in 1892, under more favorable circumstances, only one-fourteenth of that amount. Like other Russian elevators, they did business at a loss. For the two years of 1891-92 the receipts were about \$12,412.54, the expenses \$29,521.39, which shows a loss of \$17,108.85.

But to arrive at the exact amount of loss we must add the interest on the capital invested, the deprecia-

ers, but, notwithstanding there is no increase of the grain afflux to be recorded, most likely owing to the comparatively high charges and fees in connection with the elevator services. The storage fee at the elevators is hardly higher than at ordinary warehouses, especially in long keeping, where the difference is even in favor of the elevators.

[TO BE CONTINUED.]

THE WILSON TUBULAR DUST COLLECTOR.

Ever since dust collecting machinery has been considered a necessity in the equipment of a grain elevator, cloth has been looked upon as one of the natural mediums for filtering dust-laden air. The Harmon Manufacturing Company were among the first to bring out in practical form the tubular type of collector. The Wilson Collector was an attempt to solve the problem of supplying sufficient cloth surface within reasonable space.

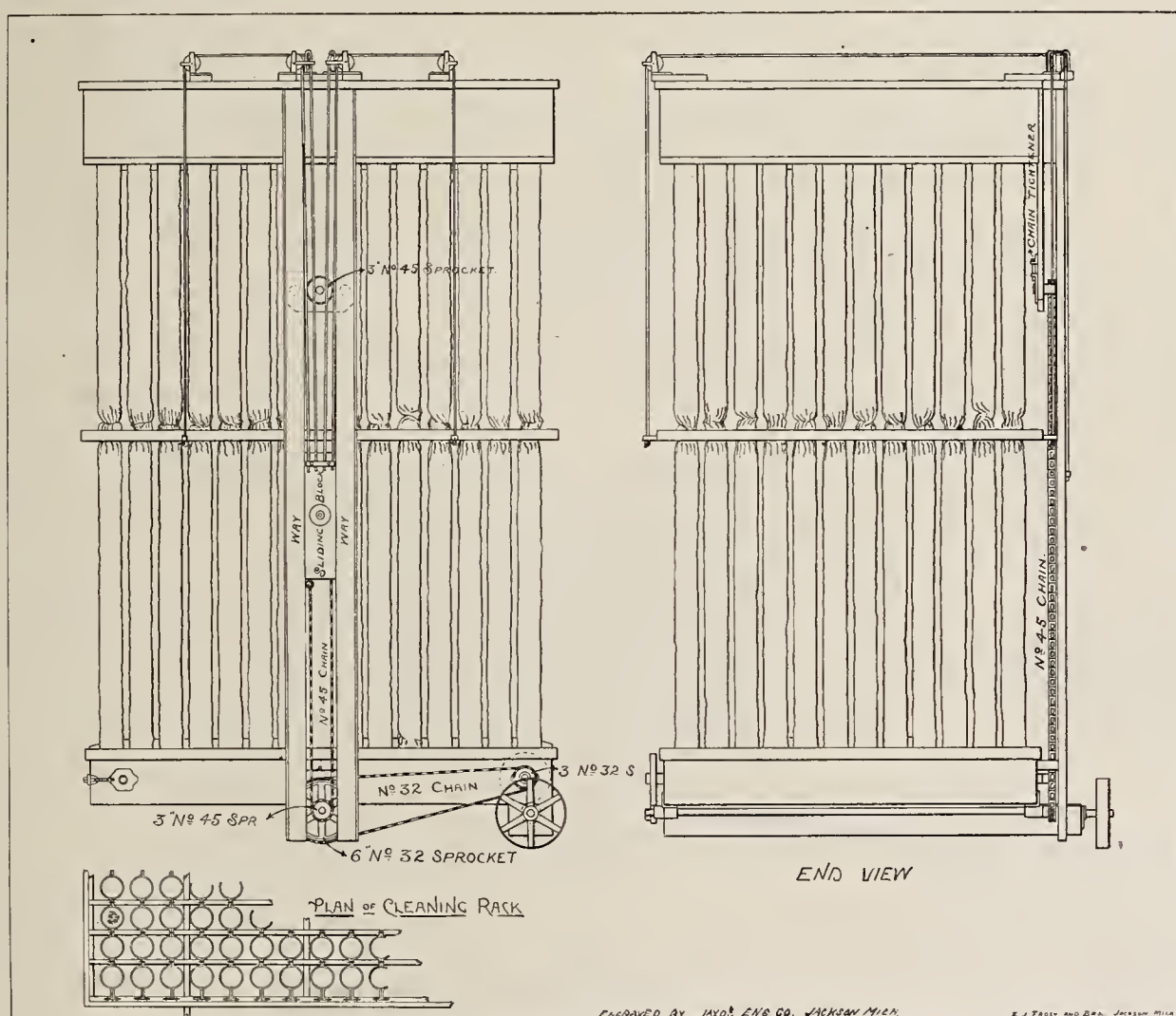
In this the machine was a success. The collector consists of an upper case into which the dust-laden air is received. Extending downward from this case to a chamber or hopper is a series of cloth tubes open at the top and bottom. Into the top of these tubes the air is expanded and distributed and in its passage downward is exhausted through the meshes of the cloth, while the dust is deposited in the chamber below and conveyed out of the collector.

While the collector was successful as regards its fundamental purpose, it yet seemed lacking in one essential feature—that is, a device that would automatically and continuously keep the tubes free from adhering dust. To remedy this old and known methods were resorted to; but while each device tried to a greater or less extent accomplished the work, still the inventor was not satisfied, believing that a perfect cleaner could be

found. After many months of experimenting a device was hit upon, and after a thorough test adopted.

This cleaning device is shown in the accompanying cut, which shows side and end views of the Wilson Tubular Dust Collector with the tube cleaner attached. The cleaning device consists of a series of wire rings supported on a frame. Each ring encircles a tube of the collector and the frame is drawn slowly up and down from end to end of the tubes by means of a simple mechanism. The rings are of somewhat less diameter than the inflated tubes, and the tubes wrinkle at the point of contact, the adhering material on the inside being broken off and dislodged. A plan of the cleaning rack is shown in the drawing.

The manufacturers are satisfied that this device embodies all the desirable features sought for. There is not an inch of cloth not in constant use, and the cleaning process is constantly going on by a slow and noiseless action. The pride of the Harmon Manufacturing Company in their interesting machine is certainly pardonable, for it comes of confidence in its working powers. They guarantee it to collect all the dust. It is protected by special patents and is licensed under the Geo. T. Smith Dust Collector Company patents. Any information regarding the Wilson Collector may be obtained from the manufacturers at Jackson, Mich.



THE WILSON TUBULAR DUST COLLECTOR

tion through wear and tear, cost of site and of construction of connecting branch railway lines and interest thereon. We will confine ourselves to the cost of buildings and appliances and the constructive capital. The issuance of 5 per cent. bonds in 4,245,000 rubles increased the cost of the elevators to 394,791.66 rubles; the interest for three years (1890-93) amounted to 59,218.74 rubles, which, together with depreciation from wear and tear, increased the total loss to not less than 123,045.82 rubles.

The claim that, though these elevators do work at a loss, they contribute to the attraction of grain to the railroad, will hardly bear investigation. In the first place, there is no evidence of the increase in the grain traffic, if there were any, due to the influence of the elevators. On the other hand, it obviously develops that owing to there being in that region no other distributing facilities, all the local and partly transit grain could not fail to go by way of the Riasan-Uralsk Railroad exclusively. Consequently there would be no reason for that railroad to build elevators to attract grain. Still less would the results of these four houses have justified the railroad company in undertaking any further erection of elevators. Yet some thirty new houses are said to be about to be erected with a quite incomprehensible hurry. Many services have been rendered by the elevators to the grain own-

MEETING OF COMMISSION MEN.

The third annual meeting of the National League of Commission Merchants, the members of which are made up largely of produce commission merchants, was held in New York City last month. President George W. Barnett of Chicago, in his annual address said, among other things, that there were fifteen branch leagues, with a membership of 158, representing over \$7,000,000 in capital invested in the business and at risk for commercial purposes and security for the payment of accounts.

Mr. W. S. Gavan of Baltimore read a paper on "Transportation." He said that one of the greatest grievances which the league had against the railroad companies was the slowness with which the latter considered just claims. He said that when the claimant was tired out the railroad companies simply pigeon-holed the claim. An address on "Trade" was made by M. U. Mackey of Buffalo. "Frauds in the Commission Business and How to Get Rid of Them" was the theme of an exhaustive address of Frank E. Wagner of Chicago, showing that commission merchants were not responsible for them.

B. Mahler of Cleveland spoke on "What a Member Should do to Increase His Own Business and His Influence in the League." He said that prompt telegraphic information to shippers of sales, etc., was a good way to increase one's business, and his influence in the league could be increased by serving its best interest in every way in his power.

After other minor business had been attended to the convention adjourned until 9:30 A. M., Thursday, at which hour business was again resumed, when the treasurer and secretary's reports were read.

The following officers were nominated and elected for the present year: President, Walter Snyder of Baltimore, Md.; vice-president, J. Vogelsang, St. Louis, Mo.; secretary, A. Warren Patch, Boston, Mass.; treasurer, Marvin U. Mackey of Buffalo, N. Y.

By an unanimous vote of the convention St. Louis was selected as the meeting place of the next annual convention, and the second Wednesday in January, 1896, as the date.

THE SYSTEM OF GRAIN INSPECTION; ITS ESTABLISHMENT AND GROWTH.

NO. XII.

The Board of Trade of the city of Detroit, Mich., was organized July 15, 1856. Reports as to the condition of the grain trade at Detroit at this early time are very meager. It was not until two years after the establishment of the Board of Trade that a grain inspector was appointed. As this was the year that the Board of Trade of Chicago commenced the formation of its grain inspection department it is not unlikely that the experience of the grain dealers at Detroit had been similar to that of the trade at Chicago. The two cities are sufficiently near one another to have some influence the one on the other and each city could easily become familiar with and profit by the other's experience.

Joseph Heitch was the first grain inspector appointed by the Board of Trade in the Detroit market. He received his appointment in 1858 and continued in the services of the board as flour and grain inspector for about 14 years. His duties were very light at the commencement of his term of office and his services were chiefly demanded by receivers of flour. As the grain trade of Detroit increased the duties of the grain inspector became more arduous. Fees were charged for the services and additional inspectors were appointed. The inspection became more systematic and required greater care from skilled inspectors.

In 1893 the Board of Trade had in its employ three inspectors of grain, and in addition to these secured special help from time to time as the trade required. During the busy season the force is increased to six men. The surprising record which Detroit made in 1893 as being the only one out of seven principal Western primary wheat markets to make an increase in its wheat receipts over the preceding year was attributed in the annual report of the Detroit Board of Trade to

the established credit of the grain trade at Detroit. Other causes were also named in the report, yet the system of inspection as practised at Detroit has been invariably satisfactory to the trade at large, and undoubtedly contributes to its success as a primary market.

At present there are four elevators in Detroit, having a storage capacity of 3,200,000 bushels. There are also four private elevators, having an aggregate capacity of about 130,000 bushels. Almost all of the wheat received at Detroit is inspected, a very small part being delivered without inspection. Of other grains it is estimated that very little more than one-half of the receipts are inspected. Very little of the barley handled at Detroit is examined by the inspectors. Previous to the year 1881 a very incomplete record was kept of the amounts of grain inspected. Wheat was the only grain of which any record has been preserved. In the year 1881 the number of carloads of wheat inspected amounted to 13,154; in 1880, 23,601; in 1879, 25,601; in 1873, 4,467; in 1872, 6,970, and in 1871, 8,268. The following table shows the number of carloads of grain inspected in Detroit from 1882 to 1894 inclusive:

Years.	Wheat.	Corn.	Oats.	Barley.	Rye.	Total.
1894....	7,870	1,644	1,545	303	149	11,511
1893....	14,324	2,162	1,787	253	183	18,709
1892....	14,209	1,766	1,666	634	459	18,734
1891....	13,044	1,915	1,616	475	919	17,959
1890....	8,716	2,469	1,685	545	271	13,686
1889....	8,936	3,270	2,063	263	130	14,662
1888....	13,678	2,088	2,180	331	143	18,420
1887....	14,300	2,920	1,409	373	7	19,009
1886....	17,547	5,119	1,936	164	12	24,778
1885....	17,246	5,950	1,349	85	25	24,655
1884....	16,438	3,311	1,390	42	21	21,202
1883....	15,612	3,723	1,722	69	7	20,133
1882....	14,923	2,172	1,249	70	8	18,422

The shipments of grain during the same period were as follows:

Years.	Wheat. Bushels.	Corn. Bushels.	Oats. Bushels.	Barley. Bushels.	Rye. Bushels.
1894.....	4,368,701	479,982	528,170	4,936	62,625
1893.....	7,303,168	833,595	286,048	138,176	89,301
1892.....	7,782,663	689,270	221,069	174,386	289,148
1891.....	5,577,494	846,433	414,292	285,848	454,156
1890.....	3,840,704	1,128,037	610,751	136,766	129,693
1889.....	4,514,429	1,597,263	653,336	11,288	59,273
1888.....	6,586,339	757,526	1,007,430	55,632	68,951
1887.....	8,053,782	1,633,920	486,440	41,700	464
1886.....	8,131,460	2,243,834	1,121,298	28,099	576
1885.....	6,170,385	2,619,240	519,694	17,405	8,407
1884.....	7,023,370	1,424,140	367,904	42,942	1,784
1883.....	6,260,480	1,572,627	670,882	66,667	4,075

THE NEW ELEVATOR AT PRESCOTT.

The new grain elevator at Prescott, Ont., which is to have a capacity of 500,000 bushels, will, it is expected, be ready for receiving grain by the 1st of June, says the *Montreal Bulletin*. One of the advantages likely to accrue from the erection of this elevator is a rapid discharge on arrival of vessel, as it will have two marine legs, capable of lifting 20,000 bushels per hour. The S. S. Algonquin, which carries more than any other Canadian vessel that comes to Kingston, can therefore be discharged in a little over three hours.

When it is taken into consideration that the actual working expenses of the S. S. Algonquin are about \$100 per day, it will be seen what a saving will be effected in the expense of discharging alone. This is an advantage which will no doubt induce vessels to resort to Prescott; and it is thought by the trade that in consequence of such rapid facilities for discharging vessels, shippers will be able to bring grain to Prescott at even less rates than to Kingston, being attracted thither by the improved facilities afforded at the former port.

Once grain is at Prescott it is believed by some that it can be taken to Montreal by either rail or water for 1 cent per bushel. In our mind, however, it is doubtful if it can be carried at that low rate. Still, there is no telling what the new elevator facilities at Prescott will be able to accomplish by the improved system on which it is being erected, more especially as regards its wonderfully rapid discharging power. It is thought that the Prescott elevator will tend to reduce river transportation rates from Kingston to Montreal,

although the forwarding companies consider them quite low enough in order to yield fair dividends. The Prescott elevator will in all probability be a great benefit to the St. Lawrence route, and should be the means of abating the grain blocks at Kingston, which have proved such a nuisance in former years by interrupting business for days at a time.

It can readily be understood what an enormous amount of grain can be handled at the Prescott elevator, with its large discharging capacity. It should not be forgotten, however, that unless more grain finds its way by the St. Lawrence route than was shipped last year, neither the Kingston elevators nor the one at Prescott will have their capacities over-strained during the coming season; but it is to be hoped that last year's decreased business will not be repeated, and that the improved facilities which Prescott will have to offer will draw a much better trade to the Montreal route.

PHILADELPHIA'S GRAIN TRADE.

At the annual meeting of the Philadelphia Commercial Exchange a report was made to the members from which we take the following:

In presenting this, the forty-first annual report of our association, we regret that your board of directors does not find itself in a position to show much to encourage you. The records of the past twelve months tell of great depression in nearly all industries, with a record-breaking low price for wheat and a short corn crop—to say nothing of the most serious labor troubles in the history of the country—frauds innumerable, idle money and low returns on investments. We can truly say it has been a year of depression. But it has not been without its bright side also; there has been no severe panic or crisis such as made 1893 memorable; failures in the commercial and financial world have been fewer; though everything be dull and depressed, we look for a recovery from the present low stage and believe it has already begun.

THE GRAIN TRADE.

From the report of our inspection department we learn the total receipts and shipments of grain for the year 1894, as compared with 1893, to be as follows:

	1894.	1893.
Receipts.		
Wheat, bu.....	5,059,360	4,642,714
Corn, bu.....	4,470,539	5,331,012
Oats, bu.....	4,799,680	5,091,125
Rye, bu.....	59,220	77,000
Barley, bu.....	870,700	627,200
Exports.		
Wheat, bu.....	4,210,353	5,657,398
Corn, bu.....	2,535,435	3,985,406

We learn of no shipments of oats or rye from this port during the year.

THE FLOUR TRADE.

	1894.	1893.
Receipts.		
Flour, bbls.....	3,811,381	3,803,535
Exports.		
Flour, bbls.....	1,277,663	1,376,434

The above figures show somewhat of an increase in the receipts for 1894 over that of 1893, but a decrease of exports for the past year as compared with the year previous.

The receipts of hay and straw during the year amount to 125,600 tons. Your board congratulates the members of the hay and straw trade that not a single complaint has been made to the committee during the year, which would indicate that the rules and regulations for grades adopted during last year are well understood.

We especially call attention to the facilities for receiving and storing hay and straw now in use by both the Pennsylvania and Baltimore & Ohio railroad companies, demonstrating that the days for handling these commodities from cars on track is past, and it is to be regretted that the Philadelphia & Reading Railroad Company, nor the lines entering Philadelphia over this road, have not seen fit to furnish this important branch of our trade with equal facilities as provided by the other roads above mentioned.

A corn fair was held at Plainfield, Ind., January 23. There was a large attendance and much interest was manifested.

WHEAT GROWING IN ARGENTINE.

Mr. Wm. H. Marston of New York furnishes the following, from a letter written by a personal acquaintance at Buenos Ayres:

"Wheat growing in this country is on the increase to an almost incredible degree. Every year new men come from Italy, Switzerland, Germany and Spain, and engage in it after having worked a year or so as laborers to learn the customs and manners of the country and soil. And think for a moment of the immense advantages these people have over our American farmer. They hire absolutely no help except at the harvest time, but instead grandmothers, mothers and children are all to be seen working in the fields, doing all the work from plowing to harvest time.

"Now for statistics. The total amount of our last crop, i. e., harvested at the beginning of 1894, was 1,700,000 metric tons of 1,000 kilogrammes, 2,200 pounds, more or less. Amount left over from previous crop, practically nil. Amount consumed here, estimated at 500,000 tons, including about 60,000 tons exported as flour. This last item is also rapidly on the increase. Wheat exported from January 1 to June 30 last, 1,029,546 tons. As to possible export between June 30 and January 1, 1895, it is calculated that there still remains a surplus in the country of from 150,000 to 180,000 tons, but perhaps 50 per cent. is of inferior quality and not up to export requirements. The time of sowing is during May, June and July, and we are liable to frosts here till the end of September, down south even later."

THE CHARACTER AND THEORY OF POOLING.

The amendment to the act to regulate commerce known as the Patterson bill, which passed the House by such an emphatic majority, has, by the Senate committee of interstate commerce, been favorably reported to the Senate in the exact form in which it came from the House, and is now pending.

It would seem reasonable to suppose that the discussion of one of the principal features of the amendment, namely, that of pooling, has been both particular and extended enough to afford to those at all interested in the subject a reasonably good understanding of the practice and principles embodied in such agreements, says the *Railway Review*. And yet one has only to read the debates, both in and out of Congress, to be convinced that such is not the case; and the strange part of the matter is that this ignorance appears to be about equally distributed among the friends and foes of the measure. One of the most common misapprehensions regarding the character of a pooling agreement is that it is based upon the making of certain rates, whereas, as a matter of fact, it has nothing whatever to do with rates. It is broadly stated without fear of contradiction that no pool agreement in this country was ever formulated which contained any stipulation as to the rate that should be charged upon any article transported, the proceeds of which were subject to the agreement. In some cases the basis upon which the business shall be pooled—that is to say, the figures which shall be used in computing the pooled revenue on each particular class of freight—is named in the agreement, but that does not affect the rate that is charged for transportation.

The operation of a pool agreement is altogether confined to the distribution of revenue after it has been earned and converted into the treasury of the respective companies parties thereto. It has nothing to do either with the making or maintenance of rates. That there is less temptation to cut rates for the sake of robbing another railroad of its business is admitted, but the fact of such cut rates does not affect the division of revenue under the agreement. At one time in the history of the Southwestern pool the rates were cut from the normal basis of seventy-five, sixty-five, fifty, thirty-five and twenty-five on first, second, third and fourth and fifth classes, respectively, to ten cents on first, second and third, and five cents on fourth and fifth classes, Chicago to the Missouri River, but the divisions of revenue, under the agreement which was on the basis of actual earnings, was not interfered with. There is nothing whatever

in the principle of pooling that in any way affects the rate. Every road party to such an agreement might charge different rates between the same points without in any wise disturbing the agreement. The only result would be that the line charging the least rate would haul all the business and be obliged to divide the revenue thus earned with the other roads.

Another popular and widespread error concerning pooling is that under the law now proposed to be enacted the railroads would divide the country into sections in which all of the business would be assigned to certain roads and thus destroy competition. Were it not that so many apparently intelligent persons believe this the statement would be in the nature of a *reductio in absurdum*. Pooling arrangements are confined to the business of what is known as common or competitive points, intermediate territory being in no wise affected. Before the enactment of the interstate commerce law, in the time when the long and short haul principle was wholly ignored, it was a very common occurrence for business to intermediate points to be charged for at a higher rate than was in effect at the pooled points. Or to again use the Southwestern pool for illustration: Pooled traffic between Chicago and Missouri River points was frequently carried at a lower rate than business coming from or going to intermediate points. Under the present order of things this would of course be impossible, but the fact is sufficient to show that the fears of many people regarding large sectional pools are wholly unfounded.

PROTECTION TO BUYERS OF MORTGAGED GRAIN.

A. B. Robbins, the well-known elevator man of Minnesota, has introduced the following bill in the House of Representatives of the Minnesota Legislature:

A bill for an act, entitled "An act concerning chattel mortgages and other liens upon grain, and providing for the protection of mortgagees, lien-holders and good faith purchasers of grain upon which there is a mortgage or other lien. Be it enacted by the Legislative Assembly of the state of Minnesota,

"SECTION 1. That any personal property in actual existence may be mortgaged, but in the case of growing crops the filing of the mortgages or liens thereon shall cease to be notice to bona fide purchasers thereof in good faith for value after said crops have been threshed and removed from the land where grown.

"SEC. 2. Every owner or holder of any mortgage or lien upon crops under any chattel mortgage or lien given or obtained upon crops growing or grown during any season upon land described in said chattel mortgage or lien statement, who shall knowingly permit said crops to be threshed and converted into marketable merchandise and removed from the land where grown, or shall fail to take seasonable possession thereof, shall be forever estopped from claiming or asserting any lien upon the crops so grown after the removal thereof as against bona fide purchasers or encumbrances thereof for the value without actual notice of said lien.

"SEC. 3. This act shall take effect and be enforced on and after the 1st day of July, 1895."

HAY WAREHOUSES MAKE A MARKET.

The warehouses located in New York City and at Palmer's Dock, Brooklyn, N. Y., are immense structures of brick, three stories high, with iron doors both inside and out, and fully equipped with the latest improved machinery for hoisting hay in and out of the building, says the *Hay Trade Journal*. The buildings are as nearly fireproof as it is possible to make them. It is generally known that for the use and privileges of these warehouses, the railroads impose a charge of \$1 per day on each car after the day of arrival and the following two days. This is what is called storage, and by some demurrage, and in every case falls upon the receivers of hay, and is considered a part of their running expenses. It is nothing more than a rental for holding and distributing the hay. This cost is reasonable considering the high valuation of property in these markets, and the unexcelled facilities afforded for the conduct of the business. All

shippers knowing these facts can rest assured that their consignments are properly housed and protected from the elements after reaching their destination.

There is an important feature to be considered, and that is these warehouses make a market. All buyers recognize such a market as a great point of delivery, and go there to supply their wants. They do not as a rule seek out some obscure location to find what they need, where there is no great variety, but prefer the great thriving hay market. Certainly the advantage both to buyer and dealer is unmistakably on the side of the larger and more accessible markets, the center of traffic, as compared with the isolated places where hay is sold.

TO REGULATE SUPERIOR ELEVATORS.

A bill has been introduced in the Wisconsin Legislature by Senator Mills which is aimed at the Superior elevators.

After defining a public warehouse according to the usual meaning of the term, the following important section follows: "The proprietor, lessee or manager of any public warehouse shall keep an office for the transaction of its business within this state, and if such warehouse be located in any city within the state where grain is bought and sold in open market, or in a regularly established Board of Trade or Exchange or other place of business engaged in dealing in grain upon consignment or commission, then such office shall be kept and maintained for the purpose of transacting its business within the limits of such city; and such proprietor, lessee or manager shall be required before transacting any business to procure a license, which license shall set forth the location and name of said warehouse, and the individual name of each person and interested owner or principal in the management of the same; or if such warehouse be owned or managed by a corporation, then the names of the officers of such corporation shall be stated; and the said license shall give authority to carry on and conduct the business of a public warehouse in accordance with the laws of this state for one year from date of its issue, unless sooner revoked, as provided herein: this section applies only to such elevators and warehouses as are located in cities having less than 150,000 population and in which cities are located a regularly organized Board of Trade having a membership of at least 75, and having received in membership fees at least \$5,000."

It is provided that persons holding a license shall give a \$10,000 bond. It shall also be their duty to receive for storage any grain without discrimination as to persons. All grain received shall be inspected.

Penalties are provided for transacting elevator business without a license, or for any person who inspects grain without being sworn in in that state. This section is not intended to abolish Minnesota inspection, but to prevent inspectors acting without the authority of the Superior Board of Trade.

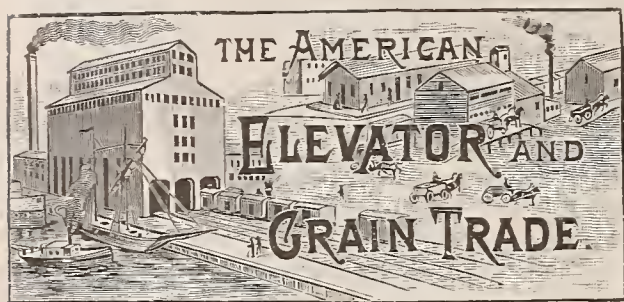
SCREENINGS.

Fair maids, I do not sing to thee,
My choicest verses ne'er are thine;
I've chose a love more dear to me,
Sweet wheat, come be my valentine.

"If this here gover'ment," said the mountain resident, "would jest let the stills run free, we'd give them Western sufferers all the corn they could hold up under!"—*Atlanta Constitution*.

Week in, week out, the boys on 'Change will see that movement grow. They'll see their Baker deftly make somebody's cake all dough. For by the great horn spoon, he says, the bucket shops must go!—*Chicago Tribune*.

"I dropped a clean thousand in wheat this morning," groaned the man with the green goggles. "I make a failure of nearly everything I undertake, and it's all because my parents didn't give me a name with a 'J' in it. Look at the men with a 'J' in their names. They always have luck." "I don't know about that," said the man who had his feet on the table. "but you always seem like a regular 'J' on 'Change."



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

MITCHELL BROS. COMPANY

(INCORPORATED.)

OFFICE:

Howland Block, 184 and 186 Dearborn St.,
CHICAGO, ILL.

Subscription Price, - - - \$1.00 per Year.

English and Foreign Subscription, - - 1.50 " "

English and Foreign Subscriptions may be sent to W. H. Smith & Son, 186 Strand, London, W. C., Eng.

A. J. MITCHELL, - - - Business Manager.
HARLEY B. MITCHELL, - - - Editor.
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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., FEBRUARY 15, 1895.

SELLING MORTGAGED GRAIN.

A bill has been introduced in the lower house of the Minnesota Legislature, which, if it becomes a law, will give some protection to the grain buyers of that state. In most of the states, and in Ontario, a mortgage or a lien on the growing crops follows the harvested grain, and actual grain dealers are called upon now and then to pay for grain a second time. The Minnesota bill, which is published in full in this number, provides that when a holder of such a mortgage knowingly permits the crops to be harvested and removed, or if he fails to take seasonable possession thereof, forfeits his lien, as against bona fide purchasers.

The bill is none too strong and will not prevent swindlers from imposing upon buyers without punishment. Holders of such liens could make their claims much more secure by notifying the regular grain dealers in neighboring markets of their lien. If they will not take this precaution they should not be given the legal right to collect the amount of their claim from these dealers. As a rule, the irregular dealers are utterly irresponsible; nothing could be collected from them, so they do not need any protection. It is the mortgagee's fault and loss if he permits the grain to be sold to such a buyer.

The seller of mortgaged grain should be treated with greater severity than at present, as the punishment does not seem sufficient to discourage this swindling practice. The punishment varies in different states, and in some is very light. This should not be. The selling of mortgaged grain should be made a crime in all the states, and be made punishable by imprisonment, as well as payment of a fine.

The Illinois Grain Dealers' Association and some dealers in other states have been working

for the enactment of more stringent laws on this subject, and in this work they merit the encouragement and support of every dealer. Every influence should be brought to bear upon dealers' representatives in the state legislature to enact laws which will protect them from this class of swindlers.

PROTEST AGAINST EXTORTION AT BUFFALO.

The boatmen of the Erie Canal have commenced to protest against the continuance during the next season of navigation of the extortionate charge of $\frac{1}{4}$ of a cent per bushel for transferring grain from lake vessels to canal-boats. The charge allowed by the New York law is $\frac{3}{8}$ of a cent, and the boatmen propose to ask for a reduction to $\frac{3}{8}$ of a cent. With rates at the latter figure the elevator pool would not be bothered with avaricious competitors as it was last year and during several former seasons.

Some of the canal boatmen threaten that unless their request for lower rates is granted they will erect elevators of their own at Buffalo to handle all the canal grain. It is perfectly natural that they should do so, for the elevator men have always diverted as much grain to the rail carriers at that point as possible.

The Lake Carriers' Association is also protesting against the exaction of the Buffalo elevators. The elevator men charged vesselmen an extortionate price for shoveling the grain to the elevator leg, and if the grain did not flow freely the rate was doubled and trebled. The vesselmen insist that the elevator men shall sell or lease the steam shovels and that the rate for shoveling to leg in vessel shall be less than the \$3.75 per thousand charged last year.

If the grain shippers would now get up a strong protest and wage an aggressive crusade against the extortionate charges levied by the pool upon the grain passing through Buffalo, some relief might be obtained. Some of the Western shippers have made mild protests against the exaction at Buffalo, but most of them have assumed an apathy in this matter that is pitiful; they overlook the fact that the heavy charges in transit vitally affect our export trade.

The higher the charges levied upon grain between our grain fields and the foreign markets the more difficult will it be for us to compete with Argentine, Russia and other exporting countries. A continued indifference of shippers to this steal will surely result in the eventual sacrifice of their business to the rapacity of the elevator pool.

REGULATING THE CHICAGO ELEVATORS.

As we predicted some weeks ago, the fight against the Chicago elevator owners was transferred from Chicago to Springfield as soon as the legislature met. We give elsewhere a digest of the bill introduced by Senator Craig. The bill aims straight at the main point of difference between the elevator owners and the grain receivers. It expressly prohibits any warehouseman of Class A from directly or indirectly engaging in the grain business through his own warehouse. This is really the only point worth considering, for the other abuses complained of under the present system could hardly be remedied so long as the owners of public elevators are engaged in the grain business as competitors of those for whom they also act as custodians.

The bill proposed by Senator Craig is really nothing more than an explanatory amendment to the warehouse law as it exists at present. The law certainly did not contemplate that the owner or lessee of a public elevator should engage in the business of buying and selling grain. The Railroad and Warehouse Commissioners have given their opinion that the intent of the

law is that the owners of public elevators shall not handle their own grain, but only the grain of the public. Of course they can make their elevators private houses if they want to. There is nothing in the construction of the law as it is interpreted by the decision of the commissioners to prevent a public elevator owner from engaging in the grain business provided his grain is not received or handled in his own house.

Should the bill become a law we do not believe its enforcement will be so difficult a matter as some suppose. The grain business can hardly be carried on in a surreptitious manner, nor do we believe anyone would care to do so. The law will simply require an elevator owner to do his grain business outside the public elevator which he controls, and leaves him free to engage in the grain business to any extent he sees fit, either as the owner of a private elevator or in houses other than his public elevator. The requirement is a just one; it simply puts all grain dealers on the same footing so far as public-controlled houses are concerned. In no respect could the law be construed as an infraction of personal rights. It simply withholds a license as a public warehouseman from those who handle their own and their competitors' grain.

DAMAGES DUE TO DELAY IN TRANSIT.

A suit brought at Kansas City to recover damages for delaying two cars of corn which has been watched eagerly by many shippers has been dismissed and the just cause of the shipper has been given a backset once more. The suit was brought by the Dayton Commission Company against the Kansas City, St. Joseph & Council Bluffs Ry. Co., and after it had been on trial three days was dismissed by the plaintiffs, who saw that the case was going against them and that they would surely lose it. On condition that the commission company would dismiss the suit, the railway company agreed to pay the costs and was glad to get out of it so easily. If the commission company had won this, hundreds of similar suits would have been brought against the railway company.

Shippers lose thousands of dollars annually by having their grain delayed in transit. They lose not only by the decline in the markets but they lose the interest on the capital invested in the grain during its transportation to its destination. A firm which has 10 to 50 cars delayed three to six weeks in transit will recognize the force to this point.

When a carrier accepts freight for transportation, it contracts to deliver that freight at its destination at the hour the train is scheduled in its time table to arrive at the destination. If the grain is delayed in excess of 48 hours the carrier should be required to pay demurrage just as shippers and receivers are required to pay in some places. The demurrage charge should be reciprocal.

THE IRREGULAR BUYER.

The large receipts of grain at some country markets recently have attracted a swarm of irregular buyers and made the business decidedly unprofitable to the regular dealers who have gone to the expense of erecting an elevator. An Iowa newspaper says: "Transient grain buyers have been at Marcus, and by paying a cent or two above the regular price, as they well could, because the farmers loaded the grain into the cars, and elevator expenses were saved, the local buyers were left without business. As a remedy the *News* proposes that the ordinance against transient peddlers be enforced."

The merchants who help support a town's government, as well as its churches, schools and other institutions, are surely entitled to protection from traveling merchants who have their office in their hats, pay no taxes and give no support to local institutions. Being very irreg-

ular in their place of doing business, many of them are also very irregular in their methods of doing business and frequently they bring the town into disrepute, among the farmers, as a grain market.

The city council of Dayton, Wash., persists in licensing all lines of business, and thus does not protect the home merchants, but it does discourage transient merchants. It passed an ordinance over the mayor's veto, taxing each line of business. Merchandising, \$5 a quarter; brokers, grain dealers and banks, \$15. This is unjust to the local merchants, who generally pay the principal taxes to support the town. The license fee should be collected only from the transient merchants.

A NUMBER of dealers have lately indulged in some very sarcastic remarks about the old wheat in the Chicago elevators, and some have evidently been haunted with visions of gigantic weevils chewing their grain, and the steam arising from their grain has often choked them in their dreams. Elevator men who own grain in their own houses are too shrewd to permit weevils to remain in grain. When they find any grain infested with weevils they run it into an empty bin and the fall kills them. Wheat over six months old will not heat unless it gets damp. The storage elevators of Chicago are well covered. On July 7, 1894, there was 17,699,000 bushels stored in the public elevators of Chicago. On February 9 there was 26,950,000, an increase of 9,251,000 bushels. From July 1 to February 9, 21,514,000 bushels of wheat were received at Chicago, but of course all of this grain did not go into store. The shipments, however, have been drawn entirely from the old wheat, as the law provides that the public elevator man shall give out first the grain of the grade called for which was first received.

RECOMPENSE FOR COUNTRY ELEVATOR MEN.

The Illinois Grain Merchants' Association has petitioned the Railroad and Warehouse Commission to require rail carriers to furnish facilities for receiving grain in bulk or else to pay the elevator men for the use of the facilities provided. The chairman of the commission was of the opinion that the commission did not have the power to do so, but they would listen to further arguments.

A law enacted by the Illinois Legislature of 1877 provides "that all railroad companies in this state shall and they are hereby required to build and maintain depots for the comfort of passengers and for the protection of shippers of freight at all towns and villages on the line of their roads having a population of 500 or more." It does not except grain or any other produce, so if the station agent at any such station refuses to receive grain in bulk or otherwise, as he surely will do, an appeal of the case to the Railroad and Warehouse Commission would bring out a decision requiring the carrier to receive the grain.

If it undertook to receive grain in its regular freight house in bulk, it would soon be swamped by the expense of handling grain and its freight depot would be jammed. The law provides that it shall issue a clean bill of lading for all freight received, and as no carrier has facilities in its freight house for handling and loading bulk grain it would lose considerable, which shippers could compel them to pay for. Carriers would soon be driven to despair and sue for peace, and shippers would gain their point. We publish a decision of the New York Court of Appeals in this issue in which it is decided that it is the duty of railway companies to load freight, and the law is not different in Illinois.

The Illinois law does not require carriers to erect special houses for the handling of grain, but it does require them to furnish freight houses. As they could not handle grain

economically in their freight houses as constructed at present there is naught in the law to forbid them compensating the elevator man for every bushel loaded out of his elevator. However, he might be required to receive grain from all comers for loading into cars, but he could not in justice be required to store any grain in excess of 48 hours without extra pay. This is the arrangement the Kansas and Nebraska Grain Dealers' Association attempted to make with the carriers several years ago.

Before the interstate commerce law went into effect it was customary to give the elevator man a rebate of 2 to 4 cents on all grain shipped out of his house. Elevator men are justly entitled to pay for this service and they can surely secure it if they will work together and keep persistently at it.

WILL NOT HAVE TWO INSPECTION DEPARTMENTS.

The Wisconsin legislature has not yet enacted a grain inspection law for Superior, and as all the millers and elevator companies have vigorously protested against any change being made from the present system, it seems likely that the grain trade of the cities at the head of Lake Superior will not be cursed with two inspection departments and two sets of rules governing the grading of grain.

The move was prompted by the sensational press which aims to eke out a living by playing upon the prejudice of misguided citizens. It may be that a few small-men-out-of-a-job were working for the proposed change, but no one connected with the grain trade has advocated the proposed change.

Since the protest of the elevator men and millers was sent to the capitol, but one dissenter has dared to growl and he hid behind a nom de plume while doing it. The only charge that he makes against the present inspection is that it is manipulated by politicians. That is a stock argument, discarded long ago by all Minnesota politicians, and one never resorted to by the actual grain handlers of the state. This dissenter offered nothing better, in fact nothing different. He leaves the reader to infer that the Wisconsin inspectors would not manipulate the inspection as he seems to think the Minnesota inspectors do.

The whole affair was a farce in which the actual handlers of grain appeared as objectors only. The trade is decidedly opposed to being burdened with any more departments or inspection rules for grades. There are too many now.

CHICAGO'S CONGESTED ELEVATORS.

Not the least of the evils connected with ownership of public elevators by parties engaged in the grain business themselves is the congestion of wheat that is now the regular thing in Chicago elevators. President Baker called attention to this fact in his inaugural, and there can be no doubt that the huge visible supply of wheat piled up at Chicago has been one of the most potent factors in depressing prices.

Under the present system there is a tendency to continually expand the storage capacity; and after the storage is built, to keep it filled constantly. The warehouseman not only supplies the storage, but the grain to occupy it; anomalous condition surely when one party controls both supply and demand. After the elevator is built and his license as a warehouseman secured the owner can send out and buy grain to fill it. Then, to earn charges on his grain, he sells it to other people for future delivery. Meanwhile if so disposed (and the temptation is great) he can sell the top of the grade at a premium and leave the bottom to redeem the certificates with.

That is why some people are advocating the building and operation of terminal elevators

by railways. Indeed, one road in the Northwest proposes to try the experiment, and handle grain as it handles other freight. It is argued that the railroads would make every effort to prevent congestion of grain at its terminals. Now it looks as if under the present system the congestion of wheat is to be a regular thing; regular, because it is profitable, and profitable because the opportunities are such that wheat gets here that would naturally go elsewhere. This is one aspect of the question that reinforces the cry for reform.

The National Board of Trade, at its recent Washington meeting, which was its twenty-fifth annual gathering, adopted a resolution reciting that the crop reports issued by the government have been confusing and urging upon the authorities the necessity of giving every needful effort to insure the fullest degree of efficiency. This was a sort of compromise sentiment, some wanting the reports discontinued altogether. A committee was appointed to confer with the Secretary of Agriculture to see if means could not be arranged for securing greater accuracy. A number of other recommendations were adopted relating to finances, immigration, taking the tariff out of politics and the like, not one of which will be heeded by Congress.

NEW WAREHOUSE LAW FOR KANSAS.

A bill providing for a new warehouse law has been proposed by Senator Shearer in the Kansas Legislature, and although the state does not need a warehouse law, the trade will probably be better off under the proposed law than under the existing one. The bill changes the name of the railroad commission to the railroad and warehouse commission, and charges it with the supervision of the execution of the act. This is much better than board of trade supervision, which turned the state's inspection department into a money-making scheme for private corporations.

The proposed law contains none of the fanatical views of the bunglers who made the existing law, and it is evident that the framers of the bill made a study of the best existing warehouse laws before attempting to draw up the bill. It provides for the regulation of the storing, inspection and weighing of grain much the same as is done by the Minnesota law, and it differs from the Illinois law in that it provides for the regulation of the public weighmaster. One good feature this law has which other warehouse laws have not is that public warehousemen shall, at least once a year, and under the supervision of a public weighmaster, weigh all grain in store and report to the warehouse registrar the amount of each kind and grade in store.

RATES on grain to the seaboard have been reduced, or at least they were reduced February 4. How long this rate will remain in force is indeterminable. The profit at 20 cents is large, and the mania for cutting rates is strong.

The elevator men and millers of Norwalk, Monroeville, Belleville, Sandusky and other neighboring towns in Ohio have been trying to organize an association. They have many things in common and no doubt can do much to materially advance such interests.

A BILL has been introduced in the New York Legislature which provides for the taxing of all sales for future delivery where the seller does not possess the grain or produce at time of sale, and requires the treasurers of exchanges to report to the state comptroller all such transactions. There is little probability of the bill becoming a law and the trade is not giving it much attention.

EDITORIAL MENTION

Avoid shortages by preventing them. Cooper well your cars.

The hay dealers have organized a national association, the grain dealers have not.

The wheat area in the Punjab, the most important wheat growing state of India, is returned as 300,000 acres less than last year. Is it possible that they are getting tired of cheap wheat even in India?

FARMERS who build an elevator this year to establish a competing house will regret it greatly next year or the year after when the sheriff sells the plant at less than one-half its cost. Very few of the farmers' elevator companies have been successful.

The country elevator man who is not grinding feed this season is losing an excellent opportunity to make his house a source of profit. In many districts little grain is marketed, and some elevator men have discharged their help and have not enough to do to keep themselves busy.

Do NOT break your finger nails and the Decalogue trying to get this journal out of its wrapper. Neither is it necessary to cut the cover to pieces in order to get the wrapper off. Just pull the string which you will find where the end of the wrapper is slit and you will have no more trials in this line.

VESSELMEN on the great lakes are not encouraged by the outlook for the early spring carrying trade. It is expected that there will be a scramble to get freight owing to last year's light corn crop; but the vesselmens hope that this year's crop of corn will even things up some, the last of the season.

AN Iowa gentleman who loves humanity continues to advertise a "\$500 span of horses given away for the best bushel of corn in the ear sent to him before March 1, freight prepaid." The fact that he has been advertising this scheme for five months carries the conviction that there was no shortage in the crop of suckers last year.

INADVERTENTLY we failed to credit the Division of Statistics of the United States Department of Agriculture with the article on "The Production and Consumption of Rice in the United States," which was published in the October, November and December numbers of the AMERICAN ELEVATOR AND GRAIN TRADE.

THE Buenos Ayres *Standard* says that the Argentine wheat crop has suffered considerably from frosts and rain since November, and expects a yield of about 55,000,000 bushels of inferior quality, against 80,000,000 bushels last year. Dornbusch, however, says that the first arrival of wheat from La Plata was excellent in quality.

A STRONG company has been organized at Brooklyn to operate about 30 elevators and warehouses and several miles of wharves. The promoters claim that their purpose is to so reduce the charges on grain passing through New York harbor that the large quantities of grain now being "diverted to other ports will take its natural course and go out of the country via New York." Judging from past experience with combines and trusts an immediate increase

in the number and amount of charges on grain passing through that port may be expected.

THE *Market Report*, issued by the Toledo Produce Exchange, has been succeeded by the *Toledo Daily Market Report*, an eight-page daily containing a report of the principal markets of this country and Europe.

DOWN at Ottawa, Ill., a grain dealer has received an unsigned letter inclosing \$7 as conscience money. The letter stated that the dealer had overpaid the writer that amount in settling for grain fourteen years before. It is to be hoped that this revival of conscience will become epidemic and extend even to the railroads, causing them to disgorge to the grain dealers. But we fear the hope will never be realized.

THE damage to grain in elevators destroyed by fire is seldom underestimated, and frequently those who buy the grain remaining in the ruins succeed in selling it at a good profit. However, it should not be mixed with other grain and should not be sold to a miller without informing him of the fact that it was in a fire. The miller might not discover it, but the persons who mixed the flour with water would and a lot of kicking would be done and some customers lost.

As the Supreme Court of Minnesota decided that the state could not build grain elevators under the present constitution, a member of the present legislature has introduced a bill providing for the submission to the people of an amendment to the state constitution, authorizing the state to construct elevators and warehouses at terminal points. It is not likely that the amendment will ever be submitted to a vote of the legislature. Paternalism has not many supporters in the present legislature.

THE cable brings the startling news that a dozen members of the House of Commons have been listening, by invitation, to the views of an expert (unnamed) on "American Wheat Gambling." This unknown expert stated that the pernicious speculation at Chicago had much to do with agricultural depression. We will wager this "expert" was John Burns, M. P., who spent 30 minutes in looking at a city of 1,500,000 people, and then announced oracularly that, "Chicago is a pocket edition of Hades."

THE Russian government is going to take hold of the question of low prices for wheat and rye and help out the agriculturist. A plan has been sanctioned to purchase grain direct from the grower on behalf of the state, the grain so bought to be used for feeding the army, whenever the government thinks the state of the market warrants such purchases. The government will also sell limited amounts of grain to private persons at bull prices. As a scheme of government paternalism, this is far more rational than some of the plans offered by our political farmers.

At the present writing there seems no prospect of the passage of the Pooling bill in the Senate, in spite of its triumph in the House. It is understood that 55 senators would vote for it if it came up. It is also understood that several senators are ready to talk it to death the moment it gets before the Senate. The fact that a large lobby has been at work has injured rather than helped the bill: for some senators who are honestly in favor of the measure on its merits do not want to rest under the imputation of having been influenced by the lobby, and in consequence will not be sorry to see the bill die in default of action. The resolutions passed by the Minnesota legislature and presented to the Senate by Senator Davis have had an effect on

the destinies of the bill. The preamble to the resolution states that Minnesota has tried to protect its people from unequal and unreasonable traffic charges and has found itself handicapped by the fact of the carriers being mediums of interstate commerce. So it is all over with the Pooling bill, apparently, for this Congress.

THE Minnesota Farmers' Alliance is urging the state railway and warehouse commission to adopt the National Transfer & Weighing Company's scheme for preserving the identity of grain from various sections of the country. The contents of a grain car would be transferred and weighed to another car without mixing, and the grain arrive at its eastern destination with its identity unchanged. It is urged by the Alliance that in this way each section would get the proper credit for the good quality of its grain. The objection made to it is that it would require the grain trade to keep a grade record of appalling proportions or get into trouble.

It is said that the largest check ever drawn was that which was paid over in the New York and Brooklyn elevator and warehouse deal. It was for \$12,278,750. The capital stock is \$30,000,000, and it expects to make 7 per cent. or thereabouts, not by increasing charges, but by reducing expenses. In fact, we are assured that the members of the trust "justly complain of high rates." They are doubtless philanthropists; but if their philanthropy takes the form that most trusts exhibit, they will not earn 7 per cent., but Philadelphia and Baltimore will. It takes but little to deflect traffic in times like the present when margins of profit must be seen with a microscope.

THE car service committee of the Cincinnati Freight Bureau has been investigating the legal status of the car service rules, and has found that any attempt by carriers to interfere with the ownership of freight for enforcing the payment of car service was perilous and without sanction of law; also that receivers in acquiescing therein run the risk of establishing a custom prejudicial to their interests. Shippers, as well as receivers, will advance their own interests by keeping this in mind and acting accordingly. Carriers have no right to detain a receiver's freight, pending the collection of demurrage or other freight, but they will establish the right by custom, if receivers will permit the practice to become a custom.

MR. CHAS. L. HYDE of Pierre, S. D., has issued a brief circular in regard to the future of wheat. His circular of last year was so wide of the mark and his predictions of possible prices were so wild, that he refrains from making definite prophecies. He says, however, that regardless of the price in Europe or the rest of the world, wheat is in the condition to become 100 per cent. more valuable from the law of supply and demand, in the United States, before next July. Mr. Hyde figures that the amount of the visible supply of wheat July 1, 1895, will be 20,000,000 bushels and the invisible the same. In that case we admit the probability of a healthy advance in wheat prices. Mr. Hyde thinks that while the wheat crop of 1893 in South Dakota was underestimated from ten to twelve million bushels, it was overestimated five or six million bushels in 1894. So he thinks that the government estimate of the crop of North Dakota and Minnesota for 1894 was fifteen million bushels too large, while California is credited with 30,000,000 bushels while the state estimates are only 20,000,000 bushels. Admitting all that is claimed for these states, however, does not render certain the advance supposed to be certain; not the large advance. Our wheat prices will inevitably seek the level

of the world's prices, or pretty near the level. And it does not appear that the world is short of wheat. An advance may come; we think it is due; but it can hardly be so large as Mr. Hyde thinks possible.

On February 1, the S. Howes Company succeeded to the business of S. Howes, Silver Creek, N. Y., and took possession and charge of the Eureka Works. The new firm was formed by a number of the heirs of the estate and the management remains practically unchanged. The manufacture of the Eureka Grain Cleaning Machinery was commenced in 1856, and has been successfully conducted ever since, with an ever increasing popularity and sale for their excellent line of machines. The style of the firm was Howes, Babcock & Co. from 1864 to 1879; and Howes, Babcock & Ewell from 1879 to 1883. On the death of Mr. Babcock the firm became Howes & Ewell, retaining this style until 1888, when S. Howes became sole proprietor. On his death in 1892 the executors appointed under his will, Chas. N. Howes, Elgin Keith and Geo. E. Towne, conducted the business under the same style which is now changed to the S. Howes Company. In taking possession of the business the company gives the assurance that the line of machinery built by the Eureka Works will be constantly improved wherever possible or feasible, and new machines added as the requirements of the trade may demand. The same thoroughness of workmanship and reliable character will characterize the Eureka machinery as in the past, and the company has ample facilities in all respects to make good its pledges to the grain handling and milling public.

Trade Notes.

Many an ad at random sent
Finds trade the merchant little dreamt.

While your drummer is snoring away in a distant hotel your wide-awake ad is hold up your wares to would-be buyers.

Doing business among a reading public without advertising is a good deal like climbing the stairs of a twenty-story building when the elevator is running.

P. Provost, B. S. Waite, A. L. Sawyer and R. J. Sawyer of Menominee, Mich., have recently taken out a patent on their grain scourer and cleaning machine in Great Britain.

James Stewart & Co., engineers and contractors for grain elevators at St. Louis and Buffalo, write us that contracts have been coming in very rapidly of late and they are very greatly rushed with work.

The Jeffersonville Corrugating and Roofing Company of Jeffersonville, Ind., has been incorporated with a capital stock of \$10,000 to manufacture iron and steel roofing. P. C. Donovan is president of the company, Thomas Fanning, vice-president, and R. M. Martin, secretary and treasurer.

The stockholders of the Charter Gas Engine Company of Sterling, Ill., at a recent meeting elected the following directors: W. S. McCloy, Jno. G. Manahan, Thos. A. Galt, V. Schiffmacher, L. M. Barrett, F. A. Greenawalt and Geo. M. Robinson. At a meeting of the directors Geo. M. Robinson was elected president and treasurer and W. S. McCloy, secretary. A cash dividend of 6 per cent. was declared on the capital stock.

A large amount of grain in the visible supply may be carried from this crop to the next, without any great pressure on the part of the owners to deliver it out on sales. We have, in the last few years, got accustomed to see a large visible. And now that familiarity with it has removed its appalling force, and that we have learned to look upon it more in the light of a dividend payer, that carriers are not over anxious to dispose of, the speculating public will not fear to linger in its shadow lest it may be unceremoniously dumped upon them.—*Market Record*.

WILL NOT SHIP GRAIN BACK TO CANADA.

The Canadian customs authorities have decided that the Manitoba wheat in store at Buffalo cannot be shipped back into Canada without paying duty.

As the law stands, no grain can be shipped from Fort William to Ogdensburg in United States bottoms and thence to Montreal, and the present decision precludes the future re-entry to points west. It is supposed that the council took the view that it would be an injury to the farmers if this wheat were permitted to return and lower the prices. There was also the question of identity, which it is difficult to preserve when the wheat has been stored in large foreign elevators.

MUST REDUCE RATES ON GRAIN.

According to the Chicago *Herald* traffic officials of Eastern roads have very nearly come to the conclusion since the current rate war set in that they must permanently reduce grain rates or retire from the business. The volume of the eastbound grain and flour movement while the printed tariff was effective, in fact, would seem to bear out the prediction. And not only this season either, for the same results have followed the maintenance of any tariff approaching the present one. In support of its assertion it says:

It has been carefully figured that the grain raised in the East, plus the elevator capacity at and east of Buffalo, will foot up a sufficient amount to cover the entire needs of Eastern and export business while navigation is closed. With a normal crop in the East and all the elevators filled by lake lines before the close of navigation, every pound of grain by rail must compete with lake lines. This is no theory. Year by year this condition has been approaching by reason of additional elevator room in the East, and this year for the first time it is a fact. Certain it is, lake lines will not maintain a basis of rates which will allow rail lines to compete at their present rates. It is then a question of rail lines competing at the rates made by lake lines.

It has already been figured out that 12 cents a hundred on grain from Chicago to New York in a train of 50 cars loaded to the maximum is a paying rate. Practically this rate has been and is now being made on train load after train load. It is a war rate, but it probably gives small profit and must soon be made openly and permanently or rail lines must give up all or nearly all of the through grain business. There is absolutely no demand for grain in the East or for export except at a cut rate from Chicago, which makes the price delivered about what the grain now in store there cost at lake and rail rates.

WHY NOT RAISE MORE RICE?

There must be a manifold expansion of the rice fields of the South before the production approaches the domestic consumption. A study of the figures covering the importation of rice for a series of years shows that the amount of foreign rice brought in would, if raised at home, furnish employment for a vast amount of capital, labor and land. The imports of rice in different forms can be measured only in hundreds of millions of pounds. A small proportion of this is sent out of the country at a slightly enhanced value, while there is practically no export business of domestic rice, in spite of the broad acres devoted to its cultivation south of the Ohio river. The tariff, of course, is not favorable to planters, as it has been lowered in the last two revisions. In the old law of 1883 cleaned rice was obliged to pay a duty of 2½ cents per pound. This was changed to 2 cents in 1890, and by the provisions of the new law which went into effect last August the duty is only 1½ cents.

The bulk of the foreign rice comes from China, although enormous quantities are brought over from Japan. The growth of the trade of the last named variety has been almost entirely since 1887, when less than 1,000,000 pounds were received. The Japanese exports to the United States have since been as high as 38,000,000 pounds in a year, but during the twelve months closing June 30, 1893, were only 16,500,000 pounds. The total imports for that year were rela-

tively small at 72,558,000 pounds, but since that time they have jumped up, and during the first eight months of 1894 were nearly 80,000,000 pounds.

The rice crop harvested in the fall of 1893 in Louisiana, Georgia and the Carolinas was placed at 123,000,000 pounds, compared with 237,000,000 pounds a year earlier. Despite imports of 140,000,000 to 200,000,000 pounds annually, the home production is only about half the consumption. The rice crop decreased in bulk during the three decades ending with 1870, and since that time has made only a moderate gain, and is still away behind home requirements.—*American Agriculturist*

AIMED AT PUBLIC ELEVATOR MEN WHO DEAL IN GRAIN.

A bill has been introduced in the upper house of the Illinois Legislature which is intended to prevent public elevator men from storing grain in their own houses.

The bill, which was referred to the Senate judiciary committee, reads as follows, the gist of the measure being found in the following paragraph:

"That it shall be the duty of every warehouseman of class A to receive for storage any grain that may be tendered to him in the usual manner in which warehouses are accustomed to receive the same, in the ordinary and usual order of business, not making any discrimination between persons desiring to avail themselves of warehouse facilities, such grain in all cases to be inspected and graded by a duly authorized inspector, and to be stored with grain of a similar grade received at the same time, as near as may be. In no case shall grain of different grades be mixed together while in store, but if the owner or consignee so request and the warehouseman consents thereto, his grain of the same grade may be kept in a bin by itself apart from that of the owner's, which bin shall thereupon be marked and known as a 'separate bin.' If a warehouse receipt be issued for grain so kept separate, it shall state the number of such bins, and no grain shall be delivered from such warehouses unless inspected on the delivery thereof by a duly authorized inspector of grain. Nothing in this section shall be so construed as to require the receipt of grain into any warehouse in which there is not sufficient room to accommodate or store it properly, or in cases where such warehouse is necessarily closed.

"No warehouseman of class A shall either directly or indirectly deal in or handle in or through said warehouse any grain for himself or for anyone acting for him, and if it shall appear to the Railroad and Warehouse Commission that the provisions of this section have been violated it shall at once withdraw its inspector from said warehouse, and shall not permit any inspection of any of the grain in said warehouse to be made."

DOTS AND DASHES.

The long continued weakness in the wheat market suggests the question if it is to be left to the United States to fulfill the prediction in the Book of Revelation that a measure of wheat shall sell for a penny. The measure referred to is supposed to have been about thirteen-twelfths of a quart.

All this talk about adulterated clover seed proceeds from the fact that purchases were made for Canada, France and Germany of refuse seed, or tailings from the cleaners, and the buyers have likely sold it out for a better grade than it was. These buyers knew what they were buying. There was no deception about it.—*Toledo Market Report*.

Chicago is a great city. She has the largest population of any city in the United States. She has the largest elevator capacity. She has the largest Board of Trade in the world, and when it comes to "push," Chicago beats 'em all. Chicago just about establishes the price of wheat the world over. All markets wait for Chicago to open before doing much. Life in the grain business without Chicago would be monotonous, and one day of such monotony as this one is sufficient to last us until Lincoln has another birthday.—*From Zulu's Circular*.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since January 15 has been as follows:

January.	NO. 2 RED NO. 2 SPG W. WHT. WHEAT.		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 2 BARLEY		NO. 1 FLAX SEED	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15	55	55	45	45	29	29	56	56	142	142		
16	54	55	45	45	29	29	56	56	143	143		
17	54	55	45	45	29	29	56	56	143	143		
18	54	54	45	45	29	29	56	56	142	142		
19	54	54	44	44	28	28	55	55	142	142		
20												
21	53	54	44	44	28	28	55	55	142	142		
22	52	52	42	42	28	28	50	50	142	142		
23	51	52	42	42	28	28	54	54	141	142		
24	52	52	43	43	28	28	51	51	142	142		
25	51	52	42	43	29	29						
26	51	51					55	55	142	142		
27												
28	49	51	43	42	28	28	56	56	142	142		
29	49	50	42	42	28	28	50	50	142	143		
30	50	50	43	43	28	28						
31	50	50	43	43	28	28						
1												
2	51	51	43	43	28	28	55	56	144	144		
3												
4	50	50	43	43	28	28	55	56	142	143		
5	50	51	43	43	28	28						
6							56	56	142	142		
7	52	52	43	43	28	28	56	56	142	142		
8	52	52	43	43	28	28	56	56	142	142		
9	51	51					56	56	142	142		
10												
11	51	51	43	43	28	28	55	56	141	141		
12												
13	51	51	43	43	28	28	55	56	141	141		
14			43	43	28	28	53	56	137	141		
15												

* Free on board or switched. * On Track.

For the week ending January 19 Prime Contract Timothy sold at \$5.55@5.65 per cental; Prime Contract Clover Seed at \$8.95@9.26; Hungarian at \$1.00@1.50; German millet at \$1.00@1.35; buckwheat at \$1.00@1.10 per 100 pounds. Receipts of hay for the week were 4,490 tons, against 5,525 tons the previous week; shipments were 575 tons, against 374 tons for the previous week. During the early part of the week a very fair inquiry existed and the offerings were only moderate. Prices ruled steady. Toward the close the demand was not so good, and, although the arrivals showed no increase, a dull feeling prevailed. Local buyers seemed to be well supplied, and the shipping demand continued very light. Prices exhibit no material change, but the market closed weak.

For the week ending January 26 Prime Contract Timothy sold at \$5.65@5.90 per cental; Prime Contract Clover Seed at \$8.80@9.05; Hungarian at \$1.00@1.50; German millet at \$1.00@1.35; buckwheat at \$1.00@1.15 per 100 pounds. Receipts of hay for the week were 4,690 tons; shipments, 495 tons. The market ruled dull during the past week. The arrivals were only moderate, but the local demand was restricted. Prices during the early part of the week were steady, but later declined 25@50 cents per ton. Sales of No. 1 timothy ranged at \$10.00@11.00; No. 2, \$9.00@9.75; mixed, \$7.00@9.00; not graded, \$9.00@10.00; Illinois Upland Prairie, \$6.00@8.00; Indiana, \$6.00@8.50; Michigan, \$7.50; Kansas, \$6.00; Minnesota, \$7.50@7.75; Wisconsin, \$7.50@8.00; Iowa, \$8.00@10.50 for good to fancy; No. 1 Prairie, \$5.75@6.00; packing hay, \$4.50@5.00. Wheat straw sold at \$4.00@4.75; oat straw at \$4.00, and rye straw at \$5.00@6.25.

For the week ending February 2 Prime Contract Timothy sold at \$5.80 per cental; Prime Contract Clover Seed at \$8.35@8.60; Hungarian at \$1.00@1.50; German millet at \$1.00@1.35; buckwheat at \$1.00@1.15 per 100 pounds. Receipts of hay for the week were 3,500 tons; shipments, 543 tons. Only a moderate business was transacted during the past week. The local demand was rather light, dealers purchasing sparingly, holding off until after the first of the month. Inquiry for shipment continues very light. The arrivals were only fair and prices ruled comparatively steady, the light offerings enabling receivers to obtain former figures. Sales of No. 1 Timothy ranged at \$9.50@11.00 for fair to fancy; No. 2, \$8.50@9.75; mixed, \$7.75@8.00; not graded, \$8.50@10.00; threshed, \$7.00@7.50; Illinois Upland Prairie, \$7.00@7.75; Indiana, \$6.00@8.00; Dakota, \$7.50; Minnesota, \$7.25; Wisconsin, \$7.75; Iowa, \$7.50@10.50 for poor to choice, and \$10.75@11.00 for fancy; packing hay, \$4.00@4.50. Wheat straw sold at \$4.50, oat straw at \$3.50@4.50, and rye straw at \$5.75@6.25.

For the week ending February 9 Prime Contract Timothy sold at \$5.65@5.80 per cental; Prime Contract Clover Seed at \$8.40@8.60; Hungarian at \$1.00@1.50; German millet at \$1.00@1.50; buckwheat at \$1.00@1.10 per 100 pounds. Receipts of hay for the week were 4,190 tons; shipments, 465 tons. The market ruled rather dull during the early part of the week. The arrivals show an increase and the demand was only moderate. Offerings of Iowa hay were small, the bulk of the receipts being from Illinois and Indiana. Toward the close a steadier feeling prevailed, for although the demand did not improve much, the receipts became smaller on account of a severe snowstorm throughout the Western states. Sales of No. 1 Timothy ranged at \$9.75@11.00, out-

side for fancy; No. 2 at \$9.00@9.50; mixed, \$8.00@9.00; not graded, \$9.00@9.75; threshed, \$7.50; Illinois Upland Prairie, \$6.00@8.50; Indiana, \$5.50@8.50; Kansas, \$11.00; Minnesota, \$6.75; Wisconsin, \$6.50@8.00; Iowa, \$8.00@11.00 for fair to fancy; packing hay, \$4.00@4.75. Oat straw sold at \$4.00@4.50, rye straw at \$3.50@4.00 for poor and \$5.50@6.50 for good to choice.

DESTINATION OF AMERICAN CORN EXPORTS.

The last report of the Bureau of Statistics shows the destination of the corn exported from this country to be as follows:

Countries.	Month ending Dec. 31.		12 months ending Dec. 31.	
	1894.	1893.	1894.	1893.
United Kingdom.	1,557,480	2,652,643	19,323,213	19,959,438
Germany.	150,865	749,633	7,166,996	7,652,962
France.	18,500	227,451	1,580,487	1,790,650
Other countries in Europe.	504,002	1,278,882	7,749,601	9,069,073
British North Am. Possessions.	114,227	221,651	3,781,338	11,883,353
Mexico.	580	11,944	227,125	2,435,591
Cent. Am. States & Brit. Hond's	15,745	27,795	346,090	186,234
Cuba.		140,944	832,496	1,148,252
Puerto Rico.			15,590	17,989
Santo Domingo.	150	6	4,587	953
Other West Indies and Bermuda.	55,960	45,372	642,977	573,274
South America.	3,220	12,697	116,204	398,243
Asia and Oceania.	1,490	6,253	11,674	23,014
Other countries.	3,176	1,250	8,333	4,892
Total bushels.	2,425,404	5,376,551	41,806,711	55,143,918

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of January, 1895, was graded as follows:

Railroad.	White.			White Clipped.		No G'de.
	1	2	3	1	2	
C. B. & Q.	383	73	137	17		
C. R. I. & P.	176	124	42	28		
C. & A.	45	59	70	16		
Illinois Central.	122	37	117	11		
Freeport Div.	104	13	12	3		
Galena Div. N. W.	135	95	51	19		
Wis. Div. N. W.	71	23	5	7		
Wabash.	60	7	53	18		
C. & E. I.	52	27	66	47		
C. M. & St. P.	220	40	58	7		
Wisconsin Central.		3				
C. G. Western.	49	28	7	7		
A. T. & S. Fe.	62	36	44	11		
Through & Special.	108	22	77	5		
Total each grade.	1,587	597	739	196		
Total oats.						3,125

Railroad.	Yellow.		White.		No Grade.
	2	3	2	3	
C. B. & Q.	17	116	3	25	131
C. R. I. & P.	3	88		3	89
C. & A.	22	381	1	76	335
Illinois Cent.		1,056	3	265	453
Freeport Div.	1	4			4
Gal. Div. N. W.	1	5	3	2	15
Wis. Div. N. W.					5
Wabash.	28	589	6	145	296
C. & E. I.	8	529	1	126	503
C. M. & St. P.	2	2			1
Wis. Central.					
C. G. Western.				1	3
A. T. & S. Fe.	1	109	3	14	129
Thrh'g & Spcl	4	314		9	198
Total each grd	7	3,196	20	665	2,157
Total corn.					292
					6,531

Railroad.	1			No Grade.
	1	2	3	
C. B. & Q.				15
C. R. I. & P.				7
C. & A.				1
Illinois Central.				1
Freeport Div.				13
Galena Div. N. W.				12
Wisconsin Div. N. W.				18
Wabash.				2
C. & E. I.				31
C. M. & St. P.				2
Wisconsin Central.				4
C. G. Western.				1
A. T. & S. Fe.				7
Through & Special.				1
Total each grade.				113
Total rye.				122

SPRING WHEAT.

Railroad.	Color.	2			No Grade.	White.			Mixed Wheat.
		2	3	4		2	3	4	
C. B. & Q.				4					
C. R. I. & P.				2					
C. & A.									
Illinois Central.									
Freeport Div.									
Galena Div. N. W.	14	8							
Wis. Div. N. W.			3	6	5				
Wabash.									
C. & E. I.									
C. M. & St. P.					1				
Wis. Cent.									
C. G. Western.									
A. T. & S. Fe.				1					
Through & Special.									
Total each grade.	14	8	8	9	5				
Total sp. wheat.		22							

WINTER WHEAT.

Railroad.	White.			Hard.			Red.			No G'de.
	2	3	4	1	2	3	1	2	3	
C. B. & Q.	1				9			81	17	1
C. R. I. & P.					36	13		16	17	3
C. & A.					25	44		26	32	6
Illinois Central.					60	15		66	37	5
Freeport Div.										
Galena Div. N. W.										
Wis. Div. N. W.										
Wabash.	2				1	3		55	97	3
C. & E. I.	3							44	33	1
C. M. & St. P.								9	1	
Wis. Cent.										
Gr. Western.										
A. T. & S. Fe.					15	77		16	36	2
Through & Spec.					10			310	45	12
Total each grade.	4	2			166	152		623	317	31
Total W. wheat.										1,299

BARLEY.

Railroad.	Bay	Brewing.	Chev.	No Grade.	Total No. Cars all grain by Roads.
C. B. & Q.		16	44		1,132
C. R. I. & P.		3	41		720
C. & A.					1,197
Illinois Central.					2,333
Freeport Div.			30		185
Galena Div. N. W.			22		397
Wis. Div. N. W.		56	74	41	325
Wabash.					1,399
C. & E. I.					1,471
C. M. & St. P.		23	130	11	558
Wisconsin Central.			5	25	35
C. G. Western.		3	38	10	153
A. T. & S. Fe.					599
Through & Spec'l.		10		5	1,254
Total each grade.		111	384	104	11,758
Total barley.					637
Total grain, cars.					11,758

DESTINATION OF AMERICAN WHEAT EXPORTS.

The last report of the Bureau of Statistics shows that the destination of the wheat exported from the United States was as follows:

Countries	Month ending Dec. 31.		Twelve months ending Dec. 31.	
	1894.	1893.	1894.	1893.
United Kingdom	6,009,920	4,028,819	48,274,077	60,475,569
Germany.....	27,600	.....	2,507,146	2,341,392
France.....	109,000	532,295	2,973,881	11,440,567
Other countries in Europe.....	859,790	1,140,530	14,551,747	28,154,772
Brit. North Am. Possessions...	16,227	4,063	4,070,976	5,484,321
Mexico.....	2,033	5	7,677	9,368
Cent. Am. states & Brit. Hond.	5,065	3,694	76,866	38,693
West Indies and Bermuda.....	2,124	2,897	10,286	18,052
Brazil.....	.....	.....	90	16,048
Other countries S. America.....	.....	30	2,934	5,858
Asia & Oceania	7,517	531	29,038	11,743
Africa.....	8,818	5,600	18,619	38,116
Other countries	.....	.....	52	.....
Total bushels	7,048,094	6,021,564	72,523,389	108,377,569

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Feb. 9, 1895, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany	60,000	75,000	18,000		
Baltimore.....	715,000	52,000	248,000	34,000	
Boston.....	796,000	217,000	206,000	10,000	
Buffalo.....	3,812,000	143,000	45,000	77,000	715,000
do afloat.....	314,000	684,000	199,000	41,000	
Chicago.....	25,516,000	4,270,000	1,066,000	110,000	31,000
do afloat.....	1,434,000	1,322,000	858,000		
Cincinnati.....	24,000	3,000	166,000	8,000	117,000
Detroit.....	1,312,000	106,000	7,000	1,000	9,000
do afloat.....	257,000				
Duluth.....	9,519,000	2,000	587,000	4,000	87,000
do afloat.....	85,000				
Indianapolis.....	136,000	198,000	96,000		
Kansas City.....	1,131,000	191,000	269,000	7,000	
Milwaukee.....	746,000		17,000	10,000	100,000
do afloat.....					
Minneapolis.....	16,934,000	8,000	589,000	46,000	74,000
Montreal.....	562,000	2,000	199,000	5,000	2,000
New York.....	8,659,000	731,000	804,000		104,000
do afloat.....	1,931,000		576,000	41,000	307,000
Oswego.....	36,000				65,000
Peoria.....	210,000	228,000	281,000	5,000	
Philadelphia.....	382,000	328,000	312,000		
St. Louis.....	4,426,000	2,833,000	456,000	3,000	22,000
do afloat.....					
Toledo.....	2,829,000	1,007,000	2,000	3,000	
do afloat.....	337,000				
Toronto.....	72,000		18,000		46,000
On Lakes.....					
On Canals.....	47,000		60,000		
On Miss. River.....					
Total.....	82,322,000	12,883,000	7,136,000	364,000	1,738,000
Corresponding date, 1894.....	79,560,000	17,000,000	3,624,000	548,000	1,489,000

*Including grain in "Armour C" and National elevators.

RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the 5 weeks ending February 2, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	3,200,880	3,398,550	365,690	562,930
Corn, bushels.....	238,790	1,809,480	7,930	1,157,850
Oats, bushels.....	288,910	214,450	206,270	78,750
Barley, bushels.....	45,050	69,000	42,140	48,290
Rye, bushels.....	10,940	14,180	6,690	5,670
Flaxseed, bushels.....	12,740	47,200	14,880	21,050
Hay, tons.....	2,391	2,743	143	100
Flour, barrels.....	7,082	23,558	405,244	560,939

RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the 5 weeks ending February 2, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	328,893	557,700	3,900	89,431
Corn, bushels.....	110,500	164,450	1,950	69,550
Oats, bushels.....	545,000	369,000	551,929	207,798
Barley, bushels.....	744,051	900,520	87,404	297,384
Rye, bushels.....	41,797	86,400	41,959	53,524
Grass seed, pounds.....	326,320	858,546	482,922	1,162,673
Flaxseed, bushels.....	6,380	31,435	3,33	20,898
Broom corn, lbs.....				
Hay, tons.....	1,486	807	12	226
Flour, barrels.....	112,675	117,985	158,637	226,843

RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the 5 weeks ending February 2, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	75,650	70,800	55,800	61,800
Corn, bushels.....	1,253,480	1,977,000	263,300	890,300
Oats, bushels.....	1,139,300	845,900	1,076,900	1,082,200
Barley, bushels.....	293,300	216,600	211,700	165,900
Rye, bushels.....	7,800	9,000	5,400	4,800
Mill Feed, tons.....	870	210	6,670	5,451
Seeds, lbs.....	170,000	80,000	174,000	113,700
Broom Corn, lbs.....	75,000	210,000	45,000	210,000
Hay, tons.....	3,600	7,000	670	1,730
Flour, barrels.....	26,550	23,550	26,200	22,250
Spirits & Liquors, bbls.....	1,913	4,449	19,044	22,908
Syrup & Glucose, bbls.....	1,300	1,100	43,920	47,830

RECEIPTS AND SHIPMENTS AT ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month ending January 31, as compared with the same period of the preceding year, were, according to Geo. H. Morgan, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	112,450	350,350	1,089,701	354,327
Corn, bushels.....	1,236,200	3,397,800	13,158	2,006,593
Oats, bushels.....	556,600	871,200	3,591	385,836
Barley, bushels.....	269,500	237,000	11,713	3,621
Rye, bushels.....	6,300	20,300	6,080	29,411
Hay, tons.....	13,745	14,880	2,526	4,160
Flour, barrels.....	69,210	85,350	131,182	152,817

RECEIPTS AND SHIPMENTS AT DULUTH.

The receipts and shipments of grain and hay at Duluth, Minn., during the 5 weeks ending February 2, as compared with the same period of the preceding year, were, according to Frank E. Wyman, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	1,012,213	1,322,520	10,186	19,079
Corn, bushels.....		91,911		18,685
Oats, bushels.....	54,944	23,251	14,878	3,602
Barley, bushels.....	15,158	10,162	8,682	19,590
Rye, bushels.....	358	6,523	358	
Flaxseed, bushels.....	491	3,321		
Flour, produced.....	25,054	73,101	25,955	57,247

*Barrels.

RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain at Toledo, Ohio, during the 5 weeks ending February 2, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	553,000	318,100	78,700	37,300
Corn, bushels.....	761,900	1,110,600	236,700	419,000
Oats, bushels.....	6,700	12,500	7,000	6,000
Barley, bushels.....	3,000	500	800	2,200
Rye, bushels.....	3,400	10,400	9,800	10,800
Clover seed, bags.....	6,212	12,096	15,978	16,597
Flour, barrels.....	6,433	9,211	52,018	48,862

RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the 5 weeks ending February 2, as compared with the same period of the preceding year, were, according to Geo. M. Lane, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	296,611	514,155	37,232	25,305
Corn, bushels.....	369,737	167,366	203,265	99,045
Oats, bushels.....	137,865	168,154	12,430	10,589
Barley, bushels.....	79,092	62,624		3,524
Rye, bushels.....	170	3,827		4,785
Hay, tons.....	955	768		
Flour, barrels.....	7,705	15,822	6,123	11,008

RECEIPTS AND SHIPMENTS AT CINCINNATI.

The receipts and shipments of grain and hay at Cincinnati, Ohio, during the month ending January 31, as compared with the same period of the preceding year, were, according to C. B. Murray, superintendent of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	97,699	67,040	60,547	33,016
Corn, bushels.....	409,578	429,994	110,432	115,901
Oats, bushels.....	294,079	230,901	121,516	73,998
Barley, bushels.....	104,940	133,550	3,500	762
Rye, bushels.....	29,158	38,702	12,157	12,275
Clover Seed, bags.....	2,648	5,203	2,314	2,804
Timothy Seed, bags.....	990	3,538	1,617	2,237
Other Grass Seed, bags.....	2,153	2,720	1,414	3,988
Hay, tons.....	9,213	5,897	5,894	2,907
Flour, barrels.....	138,218	134,277	119,984	100,962
Malt, bushels.....	61,455	64,949	40,606	44,565

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during January, 1895 and 1894, of seeds, hay and broom corn:

Repts.	Timothy, lbs.	Clover, lbs.	Other grass seeds, lbs.	Flaxseed, bu.	Broom corn, lbs.	Hay, tons.
1895 ..	1,687,180	267,519	501,665	121,683	400,158	19,340
1894 ..	2,808,205	863,270	506,423	246,026	1,934,170	25,548
Ships.						
1895 ..	1,982,482	1,137,047	235,671	60,258	253,788	2,137
1894 ..	2,823,983	3,288,621	217,460	120,510	1,044,144	5,395

RECEIPTS AND SHIPMENTS AT SAN FRANCISCO.

The receipts and shipments of grain and hay at San Francisco, Cal., during the month ending January 31, as compared with the same period of the preceding year, were, according to T. C. Friedlander, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, centals.....	788,791	881,343	610,391	780,650
Corn, ".....	13,645	39,131	7,287	19,415
Oats, ".....	56,737	19,893	1,286	3,471
Barley, ".....	90,046	140,132	13,984	1,338
Rye, ".....	3,718	1,461		
Flaxseeds, bu.....	4,238	793		
Hay, tons.....	9,862	8,012		
Flour, 1/4 bbls.....	92,130	85,820	65,615	60,127

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending February 9, as compared with same weeks last year, have been as follows:

	For the week ending Feb. 9.		For the week ending Feb. 2.	
	1895.	1894.	1895.	1894.
Wheat, bu.....	778,000	745,000	730,000	651,000
Corn.....	591,000	989,000	711,000	2,099,000
Oats.....	7,000	14,000	5,000	3,000
Rye.....	10,000			
Flour, bbls.....	185,000	228,000	237,000	238,000

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 18 months ending with January, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1894-95.	1893-94.	1894-95.	1893-94.
August.....	1,360,250	414,700	429,373	341,609
September.....	751,300	1,881,550	375,623	1,195,733
October.....	801,350	2,340,800	351,833	1,810,110
November.....	426,800	1,178,650	143,733	887,708
December.....	459,962	493,900	111,931	383,932
January.....	92,950	183,700	70,016	186,674
February.....		59,400		142,645
March.....		44,000		92,050
April.....		129,464		60,423
May.....		128,269		72,463
June.....		48,400		73,607
July.....		190,850		38,547
Total.....	3,892,612	7,093,683	1,482,509	5,285,498

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the 32 weeks ending February 9, for the three last years, according to the *Cincinnati Price Current*, were as follows:

	1895.	1894.	1893.
St. Louis.....	8,378,000	11,140,000	23,276,000
Toledo.....	12,988,000	10,533,000	20,374,000
Detroit.....	3,396,000	7,042,000	6,651,000
Kansas City.....	5,831,000	10,836,000	21,924,000
Cincinnati.....	735,000	765,000	1,480,000
Winter.....	31,328,000	40,316,000	73,715,000
Chicago.....	21,514,000	18,351,000	48,367,000
Milwaukee.....	4,507,000	8,040,000	10,361,000
Minneapolis.....	38,382,000	36,393,000	46,279,000
Duluth.....	27,275.900	27,006,000	33,192,000
Spring.....	91,678,000	89,790,000	138,199,000
Total, 27 weeks.	123,006,000	130,106,000	211,914,000

ELEVATOR

GRAIN NEWS

Minier, Ill., has five elevators.

An elevator is to be built at Superior, Iowa.

An elevator is to be erected at East Lynn, Ill.

There is a project for a new brewery at Carbonale, Pa.

G. E. Macy intends to erect a rice mill at Orlando, Fla.

An oil mill factory may be erected at Fairhaven, Wash.

A potato starch factory is to be erected at Spokane, Wash.

The Dallas Brewery at Dallas, Texas, is to be enlarged.

Magnus Huber will establish a brewery at Rock Island, Ill.

Emil Ketcham intends to start a brewing business at Erie, Pa.

J. P. Moore's grain house at Carmi, Ill., is nearing completion.

William Yung has started in the grain business at Peotone, Ill.

Jacob Steiner has started in the grain business at Mackinaw, Ill.

The Highland, Ill., Brewing Company will erect another building.

S. L. Hodgson is carrying on a grain business at Williamsburg, Ill.

Ransom & Son are dealing in grain, wool, etc., at Ransomville, N. Y.

Wheelwright & Archer, grain dealers at Richmond, Va., have dissolved.

E. W. Pierce, grain and hay dealer at Lawrence, Mass., has assigned.

Hooper & Longwell, grain and hay dealers at Dixon, Ohio, have dissolved.

It is reported that a \$50,000 brewery is to be established at Lorain, Ohio.

It is reported that a 1,000,000-bushel elevator will be erected at St. Louis, Mo.

A new grain commission house has been established at Missouri Valley, Iowa.

Richard Perry intends to erect a grain storehouse at Forestville, Wis., shortly.

Abbott & Son, grain dealers of Charter Oak, Iowa, are reported to have failed.

Meltzer Bros., brewers, of Brooklyn, N. Y., are rebuilding their storage house.

G. M. Brush & Co., grain commission dealers at Chicago, Ill., have dissolved.

It is reported that the two elevators at Mattoon, Ill., are doing a thriving business.

Bartlett, Frazier & Co. intend to erect another large elevator at South Chicago, Ill.

The brewery at Beemer, Neb., which was burned some time ago, will be rebuilt.

Negotiations are on foot for the erection of a farmers' elevator at Nicollet, Minn.

Byron Gray contemplates the erection of an elevator at Livingston Manor, N. Y.

Herman Jefts has erected a grain and feed storage building at Ashburnham, Mass.

A mortgage has been foreclosed on Agnew & Co.'s elevator at Dominion City, Man.

A. J. Auger & Co., dealers in grain, lumber, etc., at Quebec, Quebec, have dissolved.

H. Bulwinkle & Co., grain and hay dealers at Charleston, S. C., have assigned.

Morgan Taylor is contemplating the erection of a \$60,000 brewery at Oswego, N. Y.

W. F. Cooper has succeeded to the grain business of Hayes & Cooper at Amity, Mo.

W. W. Andrews of Spencer, Wis., is reported to be preparing to erect a grain elevator.

The Terrell Milling Company is preparing to erect a \$10,000 elevator at Terrell, Texas.

A movement is under way for the erection of a grain warehouse at Tacoma, Wash.

Carrington, Hannah & Co. of Chicago are contemplating the erection of an elevator.

R. M. Craig & Co., dealers in seeds and agricultural implements at Memphis, Tenn., made a partial as-

signment February 5, with liabilities at \$65,000 and assets estimated at \$100,000.

John Conners, commission dealer in hay at New York City, has made an assignment.

R. B. Oxley is carrying on a commission business in grain, produce, etc., at Victoria, B. C.

The elevator which is being built at Craigville, Ind., will have a capacity of 12,000 bushels.

I. Strain has bought the grain and grocery business of D. L. Monroe at Montezuma, Ohio.

The grain men at Findlay, Ill., are reported to be running their elevators night and day.

Slack & Clark, grain and hay dealers at San Francisco, Cal., have dissolved partnership.

A milling firm at Hamilton, Ont., is contemplating the erection of a 20,000-bushel elevator.

F. and H. Cahill have purchased the grain and coal business of Orville Davis at Sullivan, Ill.

Momence, Ill., is asking grain and hay buyers to locate there, and promises a good business.

Capitalists of La Fayette, Ind., are said to be contemplating building an elevator at Colburn.

Superintendent Potter of the F. & P. M. R. R. will erect a mill and elevator at Reed City, Mich.

Thieves at the grain elevator at Ovid, Mich., recently carried away clover seed valued at \$45.

The Cumberland Valley Railroad Company is preparing to erect an elevator at Morgansville, Md.

The Elk Brewing Company has been organized at Kittanning, Pa., with a capital stock of \$60,000.

The Saginaw Brewing Company has been organized at Saginaw, Mich., with a capital stock of \$50,000.

A. B. Marshall and James Dougrey have formed a partnership to carry on a hay business at Troy, N. Y.

The Herl-Rendlen Brewing Company has been incorporated at Hannibal, Mo., with a capital of \$56,000.

F. L. Ober & Bro., Allegheny, Pa., are about to build a new brew house and other buildings to cost \$60,000.

The new Listman Mill Elevator at La Crosse, Wis., is completed and the old one will be torn down and rebuilt.

Hubbell Bros., dealers in grain and feed at Harvard, Ill., are one of the foremost business houses at that place.

H. Long and R. Messersmith are figuring on the erection of a large elevator at Savoy, Ill., early in the spring.

The Wheeler Elevator to be erected at Janesville, Minn., next spring will have a capacity of 25,000 bushels.

The G. H. Dulle Milling Co. intends to rebuild the elevator and mill at Jefferson City, Mo., which burned recently.

The Farmers' Elevator Company of Zumbrota, Minn., contemplates building a large addition to its elevator.

Jno. E. Elton has succeeded to the business of Haynes & Elton, dealers in grain and hay at Savannah, Ga.

Farmers of Livingston County, Illinois, contemplate the erection of an elevator, which may be built at Emington.

It is reported that Joseph Wilson of Perrysville, Ind., is about to begin the erection of an elevator at Rileysburg.

George Brehm will build a storage house of 75 barrels' capacity and other buildings in connection with his brewery.

Brackman & Ker, oatmeal millers of Victoria and New Westminster, B. C., propose erecting an elevator at Edmonton.

Chas. A. Stadler contemplates making alterations to his malt house at Forty-eighth street and East River, New York City.

R. C. Wilson is a wideawake grain dealer at Heming, Ill., and handles lumber and coal together with his grain business.

B. Bockemuehl, brewer at Ft. Spokaue, Wash., is contemplating the removal of his plant to Cleveland, Wash., next spring.

J. L. S. Hunt, dealer in grain, hay, etc., at San Antonio, Texas, has incorporated under the style of the J. L. S. Hunt & Co.

J. F. Wallace and Wm. Wells have established a feed grinding plant at Rock Grove, Ill. A steam engine supplies power.

E. L. Titus, who is at present in the grain business with his brother at Harmon, Ill., expects to commence business at Steward.

It is reported that the Farmers' Elevator in North St. Louis, Mo., is to be enlarged. That is, another structure of the same dimensions as the present one is to be erected alongside. The capacity of the ele-

vator is 750,000 bushels, which, when enlarged, will make the capacity 1,500,000 bushels.

John H. Miller & Co. (Limited) have succeeded to the grain and groceries business of the firm of J. H. Miller & Co. at Tyrone, Pa.

Moffat Bros., Olympia, Wash., are rebuilding their grain sheds, which recently collapsed on account of weight of snow on the roofs.

The Crescent Grain and Elevator Company at East St. Louis, Ill., has certified to an increase of capital stock from \$21,000 to \$50,000.

The Elk Rapids Grain Company is making extensive improvements in its flour mills at Elk Rapids, Mich., and is adding new machinery.

The Rex Mill Elevator at St. Louis, Mo., which was recently damaged by fire, will be increased in capacity from 250,000 to 500,000 bushels.

The firm of Wright & Co., dealers in grain and coal at Schuyler, Neb., has been dissolved. H. C. Wright continuing in the business alone.

D. F. Bernal intends to erect a new building on the site of the old flouring mill at Livermore, Cal., and will put in a barley crusher.

The Terrell, Texas, Cotton Oil Manufacturing and Refining Company intends to enlarge and repair its plant and put in new machinery.

The Goodwine Grain Company of Goodwine, Ill., a farmers' elevator concern, recently declared a dividend of 8 per cent on certificates.

It is again being rumored that the Elgin, Joliet & Eastern Railroad intends to build elevators along its new branch in South Chicago, Ill.

The Keiser, Holmes & White Elevator Company of Gibson City, Ill., has been re-incorporated as the Keiser & Holmes Elevator Company.

Joseph Stehlin is erecting a brewery on Bushwick avenue, Brooklyn, N. Y., to cost about \$40,000 and have a capacity of about 20,000 barrels.

Edward Schwyer has sold the malt house on the corner of Tenth avenue and Forty-third street, New York, and the building will be removed.

Geo. A. Wells has succeeded to the grain business of Wells & Mulrooney at New Richmond, Wis., having purchased Mr. Mulrooney's interest.

W. G. Edwards, formerly connected with the grain and hay firm of W. H. Booth & Co. at San Antonio, Texas, has withdrawn from the business.

The annual report of the Central Elevating Company of Buffalo, N. Y., shows a paid in capital stock of \$180,000, debt \$7,000, and assets \$180,000.

It is reported that Davidson & Bond, grain dealers of Monmouth, Ore., will immediately rebuild their large grain warehouse which burned recently.

E. Rickert and C. P. Williams have formed a partnership and purchased the Filson Elevator at Dixon, Ill., and will carry on a general grain business.

The Winona Mill Company has completed its new elevator at Winona, Minn. It has a capacity of 265,000 bushels, and was built at a cost of \$35,000.

The Morrison Grain & Lumber Company of Morrison, Grundy county, Iowa, is reported to have failed for the second time, with liabilities of \$30,000.

Burbank & Burchill have a prosperous business in grain, flour, feed, etc., at Harvard, Ill., which though but recently started is already well established.

The annual report of the Exchange Elevator Company (Limited) of Buffalo, N. Y., shows a capital stock of \$150,000, debts \$20,000, assets \$170,000.

E. C. Davis, the hay merchant of Voorheesville, N. Y., was arrested recently, charged with fraud and deceit and purchasing goods under false pretenses.

Logan Henshaw, grain dealer at Dunreith, Ind., has leased G. W. Goodwin & Co.'s two elevators at New Castle, and will carry on business at both places.

The Union Grain and Hay Company of Cincinnati, Ohio, are contemplating an extension of their business interests by buying a large elevator at Milldale.

John P. Nelson, a grain buyer at Norway Siding, N. D., has been arrested, charged by the Osborne & McMillan Company with the embezzlement of \$4,500.

The W. L. Luce Grain and Seed Company has been incorporated at Minneapolis, Minn., with a capital stock of \$100,000, to carry on a general grain business.

W. L. Ellis of Seattle, Wash., has started a grain commission house at Chicago, Ill. He was formerly a prominent member of the New York Stock Exchange.

Rathje & Jurz, grain dealers at Frankfort, Ill., are starting the year with a rushing business. On one day recently they received over a hundred loads of grain.

The steamer Geo. E. Stone, from Chicago with 85,000 bushels of corn, is at Port Huron, Mich., where the cargo was found to have begun heating and had to be unloaded. A leaking pipe started the trouble.

Another steamer, with a heated cargo of 90,000 bushels of corn, lies at Port Huron. In this case a fire extinguisher spilled.

C. and J. Michael are rebuilding their burned grain warehouse at La Crosse, Wis. It will be five stories high and cost \$6,000.

The Big Bend Milling Company at Davenport, Wash., will erect a grain elevator of 100,000 bushels' capacity next summer.

O. P. Tabor of Remington, Ind., and J. L. Puntney of New Alexandria, Ohio, contemplate erecting an elevator at Remington.

Work has been commenced on the new elevator at Mapleton, N. D., which is to take the place of the one burned some time ago.

The Kankakee, Ill., *Times* says there is a scheme on foot for the organization of a stock company grain warehouse at the village.

Fifty carloads of the damaged wheat from the D. & M. elevator fire at Toledo, Ohio, were recently purchased from a Chicago grain firm at 10 to 40 cents a bushel.

H. E. Wyum and H. M. Moen have purchased the Edmunds Elevator at Bruce, Minn., and contemplate removing it to Hills, where they will carry on a grain business.

The W. S. Ankeny Seed and Grain Company has been incorporated at Minneapolis, Minn., with a capital stock of \$50,000, to do a grain and flour brokerage business.

E. S. Blair and C. W. Downey have purchased the grain, lumber and stock business of M. H. Eakle at Oregon, Ill. Mr. Eakle had been in the business for fourteen years.

Wheeler Bros., grain dealers at Germania, Iowa, have shipped 66,737 bushels of oats since last August. Other business being in proportion, they have no complaint to make.

Hiram Sibley & Co. of Chicago have issued a circular announcing that the warehouse premises occupied by them have been sold to the Sibley Warehouse and Storage Company.

Owen Bros., grain commission dealers at Milwaukee, Wis., have incorporated with a capital stock of \$25,000, and have changed the style of the firm to the Owen Bros. Company.

The corporation of the town of Prescott, Ont., will apply to the Legislature for the passing of an act to enable the corporation to bonus the Prescott Elevator Company to the amount of \$6,000.

Geo. T. McComb of Lockport, N. Y., has built a model steel hay warehouse at Gasport. It is equipped with all the modern improvements for the special purpose of handling hay with facility.

The Osborn Grain Company has been incorporated at Minneapolis, Minn., with a capital stock of \$50,000. The incorporators are: E. F. Osborn, P. O. Peterson and Arthur Clemeison, all of Minneapolis.

E. J. Cheatham, who lives near Garfield, Wash., purposes to plant 20 acres of broomcorn next season and manufacture it into the finished product himself, for which purpose he will put in a factory.

Campbell & Streeter, grain and hay dealers at Moline, Ill., are doing a good business. In one week recently they purchased 6,000 bushels of corn at 40 cents per bushel and 132 tons of hay at \$8.50.

The year's report of the Frontier Elevator Company of Buffalo, N. Y., shows that its capital stock is \$400,000, the assets amounting to \$474,358.80, and the indebtedness \$35,000. The stock is all paid in.

The Russell Grain Company has completed its new grain and hay warehouse at Kansas City, Mo., which takes the place of the one burned recently. It is a very substantial building built of corrugated iron.

The firm of Arbogast & Co. has been incorporated at Chicago to carry on a grain business. The incorporators are G. A. Arbogast, L. Stockenburg and H. Beckstrom, and they have a capital stock of \$100,000.

Farmers in the vicinity of Kenyon, Minn., are contemplating the erection of an elevator at that town. It is said that the success of the farmers' elevator at Zumbrota is the cause of recent action in that direction.

Mrs. Martin Hellman's brewing plant at Waterbury, Conn., is receiving extensive additions. The engine, refrigerating machine and storage house will be completely remodeled and the latter doubled in capacity.

A. J. Clark, a banker and merchant of De Witt, Iowa, has purchased N. E. Solomon's half interest in the Wenatchee, Wash., Mercantile Company, and it is proposed to embark in the grain business on an extensive scale.

Michael Haugh has asked that a receiver be appointed for the firm of Kerlin & Haugh. The complaint sets forth that plaintiff and defendant, Hiram Kerlin, formed a partnership in the grain business in June, 1888. They have elevators in Delphi, Flora and

Cutler, Ind., and plaintiff alleges own real and personal property to the value of \$32,000. Plaintiff alleges that he has been ill for a long time, desires to dissolve partnership with defendant, but can get no settlement.

A proposition has been submitted to business men of Fargo, S. D., for the erection of a fiber mill at that point. It is proposed to put in a plant capable of using all the flax straw raised in that vicinity and pay \$4 per ton for it.

Work on A. L. Taylor's new elevator at Wells, Minn., is being pushed forward rapidly as possible, and it will soon be completed and in operation. It will have all modern improvements for the rapid handling of grain.

The John R. Lewis Commission Company has been incorporated at St. Louis, Mo., with a full-paid capital of \$20,000, to carry on a general business in grain, etc. John R. Lewis, John T. Wallace and John P. Bergen are the incorporators.

The F. C. Trebein Company, dealers in grain and farm produce at Trebein's, Ohio, has been incorporated with a capital stock of \$60,000. The incorporators are P. H. Flynn, F. C. Trebein, John Little, C. A. Wright and Chas. L. Spencer.

The Faist-Kraus Company has been incorporated at Milwaukee, Wis., with a capital stock of \$15,000. The organizers of the new company are Wm. Faist, Frederick Kraus and Robert Munnemacher, and they will conduct a grain and flour business.

The Western Grain and Stock Exchange has been incorporated at Chicago, to carry on a general business in grain and provisions. The incorporators are J. R. Morgan, Charles Mathews and James Royal, and they have a capital stock of \$100,000.

It is said that Bartlett, Frazier & Co. of Chicago, who paid \$76,000 for the salvage grain of the large elevator which burned in Toledo a short time ago, will clear about \$100,000 from their speculation. They recovered about 300,000 bushels of grain.

Milmine, Bodman & Co., grain dealers at Chicago and New York, have decided to erect a large elevator at Homer, Ill., where they have been buying grain extensively. Work will be commenced early in the spring. W. W. Mudge is their representative at that point.

O. T. Brown has succeeded to the grain and seed business of Brown Bros. The business will be conducted at several points, with headquarters at Fostoria, Ohio. T. E. Brown, the former partner in the business, died recently, and his widow retains his interest.

A company has been organized at Marion, Ind., to do a general grain and milling business. J. L. Barley, R. J. Spencer, Geo. W. Steele, all of whom are well-known business men, constitute the new firm. The elevator and flour mill have been overhauled and remodeled.

M. R. Thackaberry has purchased the elevator and grain and live stock business of J. W. Glassburn at Morrison, Ill., and will take possession March 1. Mr. Glassburn has been in business at that point for twenty-five years, and leaves a prosperous business for his successor.

The Germantown Junction Elevator & Warehouse Company has been incorporated at Philadelphia, Pa., to do a general storage business in grain, hay, flour, etc. The incorporators are H. E. Miller, M. F. Miller, F. Miller, J. B. Haines, H. H. Klosterman, William Harper and J. E. Miller.

The estate of the late P. B. Mann, grain merchant at Minneapolis, which was valued at \$70,000, has been divided as follows: One-third to the widow, the other two-thirds equally between the two daughters and the son, E. T. Maun, the latter receiving the income from his share during his life.

Brooks, Griffiths & Co., the well-known grain dealers of Minneapolis, Minn., are reported to be giving considerable attention to the handling of cereal products on commission, making a specialty of buckwheat flour, cornmeal and feed. J. R. Martin has been put in charge of the department.

At a recent meeting of the Farmers' Elevator Company of Wellington, Ill., the following officers were elected: President, Joseph Pruitt; vice-president, Samuel Burnison; secretary, D. H. Chapman; treasurer, William Hamilton. The directors elected were Al. Brougner and Henry Zollers.

A potato starch factory is projected for Nooksack, Wash., the promoters of which are negotiating with growers for an acreage sufficient to supply the needs of such an enterprise. Washington seems determined to diversify her crops, according to the reports of potato, flax and broomcorn culture.

The case of Lehman Bros. vs. Fleming & Schweitzer has been tried in British court and judgment rendered for plaintiffs. It appears that plaintiffs, who were brokers and commission agents at Chicago and New York, were engaged by defendants to buy for them large quantities of wheat, and undertook to remit by cable such margin in respect of any change in

price which should subsequently take place. It was agreed that if the margins were not remitted plaintiffs should be entitled to close the transactions, and call for the differences. Plaintiffs did not receive the remittances, and claimed damages in the sum of £424 1s. 8d. under the agreement.

Farmers in the vicinity of Stanford, Ill., will soon begin the erection of an elevator at that point. They claim that the grain buyers are not paying all they should for grain as there are no competitors, and the enterprise for a new elevator is the outcome of an agitation which has been going on for some time.

James Cole, grain dealer at Bushnell, Ill., is making arrangements to build a new elevator to take the place of the old one which burned some months ago. It will be about 30x30 feet in size, with brick walls, brick smokestack and corrugated iron roof. Work will be commenced as soon as the weather permits.

A petition has been presented to the rural municipal council of Portage la Prairie, Man., asking it to advance \$20,000 as a loan to the Farmers' Elevator Company of Portage la Prairie, on reasonable security, a low rate of interest to be charged for the same. The company is in financial difficulties, and hopes to be tided over in this way.

Gustave Wenzelmann, dealer in farm implements, etc., at Missal, Ill., writes us that he has built a 30,000-bushel grain elevator on the Illinois Central Railroad at that place and will do considerable shipping East and to Chicago. The elevator is equipped with all modern improvements, including scales, and has a telegraph key in the office.

W. E. Ellis, Toledo, Ohio, is putting drykilns in shape for the drying of a large quantity of the wheat damaged by fire and water at the recent burning of the large Toledo elevator. He will dry from one to fifteen carloads of wheat a day. After the wheat has been dried out the biggest part of it will be shipped to New York and turned into starch.

Christie & Co., grain commission dealers at Sioux City, Iowa, report that their business this year is very good compared with what it was a year ago. It is said that during the first three weeks of the year the company has handled only a few cars of seed and feed going into Nebraska, whereas a year ago it handled 800 cars of grain in January, and all going East.

S. Parrish, grain and produce dealer of South Edmonton, has sold out his grain business to Parrish & Lindsay of Brandon, Man., who have also bought out the interests of Allen & Essery at South Edmonton, and have leased two grain warehouses belonging to Mr. Parrish. They will at once commence the purchase and shipment of grain. Mr. Lindsay is here at present and will make the necessary arrangements for conducting the business before returning to Brandon.

The Farmers' Elevator Company of St. Peter, Minn., held a meeting recently and re-elected the old officers and directors. Its reports showed that while the elevator had made no money for the year it had held its own, which the officers thought a good showing considering the stringency of the market. The management thought if the debt of the elevator, \$2,500, could be lifted, the business would go on in good shape. It was voted to sell an additional amount of stock to clear the debt.

It always turns out that there is an unusual salvage after the destruction of a grain elevator by fire. It was said after the Dayton Elevator fire at Toledo a few weeks ago that nothing remained but the smokestacks. Now it is said that the concern which bought the damaged wheat, Bartlett, Frazier & Co., have found that 200,000 bushels, more than a third of the entire stock, is good enough to go back into the regular houses. Some of it sold here at 49½ cents per bushel.—*Chicago Herald*.

The farmers' elevator question at Neepawa, Man., says the *News*, has been at last disposed of, and those who invested money in it may now console themselves with the thought that there will be no more calls made on their stock. The entire concern has been bought out by John Crawford for \$14,000, a sum equal to about the secured claims against it. The shareholders lose all the money they had in it, besides the money a number of them had lent from time to time to carry the enterprise along.

The Crocker Elevator Company has been incorporated at Maroa, Ill., with a capital stock of \$50,000. The incorporators are J. Crocker, Thomas Costello, George Conover and William Schenck. The general offices will be at Maroa, and the company will handle grain at Maroa, Emery, Argenta, Oreana and Cisco. Mr. Crocker is president, Mr. Conover secretary, Mr. Schenck treasurer, and Mr. Costello general manager. The local managers will be: For Emery, H. Malone; for Argenta, P. J. Costello; for Oreana, James Shastid; for Cisco, T. E. Frantz.

At a recent meeting of the stockholders of the Spring Valley, Ill., Farmers' Grain Shipping Company its old officers were re-elected as follows: C. M. Chase, president; M. Oleson, vice-president; J. Holly, treasurer, and William Sill, secretary, Mr. Barnard declining to serve. William Hirschy was retained as manager of the institution, the stockholders expressing themselves as well satisfied with his man-

agement. This elevator, since it has been built, has declared a dividend of over \$700 per year, and its working capital is \$2,058.11.

Albert Schwill & Co. are preparing to erect an elevator and malt house at South Chicago, Ill., at a cost of \$200,000. Simpson & Robinson Company have the contract. The malt house is to be 175 feet with an average depth of 80 feet, and will have a storage capacity for 300,000 bushels of grain. It will be six stories in the front and three stories in the rear and will be constructed of brick and steel. The elevator will be 140x60 feet and will have a capacity of 300,000 bushels. There is to be a separate engine and boiler house of brick to furnish power for the two buildings.

What is claimed to be the largest hay building in the country, and perhaps in the world, has been opened by the Lehigh Valley Railroad at Communi-paw, just over the North River from New York. It covers about 1½ acres of land, is covered with fire-proof roof and siding, and contains windows in roof and sides sufficient to light thoroughly every part. The cost was about \$74,000. Hay, on account of its bulky character, has always been a difficult commodity to handle satisfactorily, but with the facilities afforded by this building and its equipment, and good location, the problem seems to be pretty well settled.

The Board of Trade firm of William Young & Co. of Chicago assigned January 25. The firm has been in business in Chicago 25 years, and up to 1880 was one of the heaviest firms here and at Milwaukee. Since 1880, however, they have not been so conspicuous, and latterly they have been operating on a much less extensive scale. William Young, after the announcement of the failure, said that his liabilities would not be heavy, but it was impossible to estimate them. He said that the fact that he was on the wrong side of the wheat market was principally responsible for the embarrassment. The firm has settled with its creditors and resumed business.

A deed of trust has been filed on the new terminal elevator lately built by the Ryan Commission Company at St. Louis, Mo. This deed is made to secure the issue of seventy-five \$1,000 bonds, and covers the elevator building and machinery and all the property and franchises of the elevator company. The bonds carry 6 per cent interest, payable semi-annually. It is understood that almost the whole issue will be taken by members of the company who regard them as a very desirable investment, and only a limited number will be put on the market. The bonds are dated Jan. 2, 1895, and run ten years, unless the company avails itself of the option to pay them sooner. They are issued to raise money to clear off the construction account and for other purposes. Mr. R. J. Delano is trustee in the deed of trust.

W. S. Halliburton recently brought suit against the brokerage firm of Clapp & Co. of New York, and obtained judgment for \$9,543. The suit arose from wheat transactions, it being claimed that on Sept. 28, 1891, an account was made out between the firm and Bodie L. Duke of Durham, N. C., by which there was due Mr. Duke \$7,460, and the claim was assigned to Halliburton on April 4, 1893. Clapp & Co. next put in a counter claim to the effect that an account was stated with Mr. Duke on Aug. 17, 1891, whereby Mr. Duke owed the firm \$7,606. They said that the account was conducted in the name of H. J. Bass & Co., but the name was fictitious and the purchases and sales were really for Mr. Duke. Five hundred dollars was paid on account on Aug. 18, 1891, and there remained a balance due of \$7,106. Halliburton, as an answer to the counter claim, set up that H. J. Bass is a resident of Durham, doing business as H. J. Bass & Co.; that Duke was not a member of that firm, and that the transactions were conducted with Mr. Bass alone; also that transactions conducted in the name of H. J. Bass & Co. were not actual sales and purchases of wheat to be actually delivered, but were mere wagers on the price of wheat.

OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

Robert Graver of Hagerty, Hunter & Co., Peoria, Ill.
H. Hamper, Greenville, Mich., representing S. Howes.
L. S. Hogeboom, representing The Knickerbocker Company.
C. R. Knickerbocker of The Knickerbocker Co., Jackson, Mich.
J. S. Leas of the Barnard & Leas Manufacturing Company, Moline, Ill.
B. F. Ryer, representative of Huntley, Cranson & Hammond, Silver Creek, N. Y.

Chas. T. Pierce, Lewisburg, Ohio, writes: "Please send the AMERICAN ELEVATOR AND GRAIN TRADE another year. The more I read it the better I like it."

PRESS COMMENT.

MONEY SQUANDERED ON CREEKS AND SWAMPS.

A glance at the yearly appropriation bill passed by Congress causes one to wonder why so large an amount of money is devoted for the maintenance of waterways, many of them of utter insignificance and without public value, while other means of communication are altogether ignored. Thousands of dollars are yearly given to the improvement of streams upon which it is doubtful if property of equal value is transported during the year.—*Railway Review*.

TOO MANY HAY GRADES.

There is an idea being slowly but surely promulgated among hay dealers and shippers to the effect that the terms designating the different grades of hay are too numerous and that properly there are not more than three or four real grades of hay that will apply to all sections of the country alike. In the first place the grade of the hay is very insignificant, and is only a pretext in too many cases for shippers or receivers to crawl out of paying for hay on contracts at a loss.—*Haymaker*.

HUMBUGGED BY STATISTICS.

The Department of Agriculture should endeavor to improve its old line of figures, which are an everlasting disgrace to the common school system of our country, before entering on new ventures. There are no people in the United States who are more humbugged by these statistics than the authorities at Washington, for their reports are the laughing stock of the farmers and the produce trade throughout the country. The reading and thinking public should be credited with at least ordinary common sense.—*Economist, Chicago*.

THE COMMISSION MAN'S DILEMMA.

The commission man pays the draft of a shipper against his consignment, waits from three days to three weeks for the arrival of the hay; then sells to the retail trade, and again waits four, eight and twelve weeks longer for his pay, and this is called business. Why should the commission man furnish the capital for both the shipper and the dealer? The shipper should have capital enough to buy the hay, the commission man capital enough to take care of such reasonable drafts as are made against shipments, and the dealer sufficient capital to pay for his goods when he gets them or at stated periods.—*Hay There*.

A NEW COMPETITOR THREATENS BUFFALO'S ELEVATOR TRUST.

If it should transpire that the canal men and forwarders should combine and build and operate a couple of elevators for the transfer of canal grain at one-quarter of a cent a bushel, as they could, for a profit, and which many boatmen are urging, the company now being formed to do it would far more disastrous to the trust than a voluntary and permanent reduction on their part to five-eighths of a cent a bushel. When the canal men do build elevators the most careful provision will be made to forever prevent their sale to the pool, and the day that these elevators are built will mean fearful disaster to the trust.—*Canal Defender*.

COMPETITION IN WHEAT SELLING.

To maintain the prices of the things we sell, and to reduce the prices of the things we buy, are among the most important business considerations of life. In both these lines we have to meet competition. In the sale of our exportable crops, we meet the competition of the world. What interests us most in this locality is the competition we meet in the sale of our wheat and flour. Until recently we hardly dreamed that Argentina would ever become a real competitor. If it had been told us, not so very long ago, that the prices of our grain would be materially weakened, by the crops of South America, the idea would have been ridiculed.—*Minneapolis Market Record*.

RAILROAD OWNERSHIP OF WAREHOUSES.

A large number of grain dealers in Central Illinois have addressed a petition to the Railroad and Warehouse Commissioners on the subject of storage. They ask that the freight rates shall be adjusted so as to make the railroad companies furnish storage for grain awaiting shipment or pay for storage furnished by the shippers. This request relates, of course, to storage at the stations along the lines of the roads, not to storage at Chicago. Along many of the lines of the new roads at the west the railway companies built elevators and warehouses as the tracks were constructed from point to point. Several of the railroads built elevator systems at Milwaukee and Chicago, which they still own. These facts indicate that the men who built the roads understood that storage should be pro-

vided by the transportation companies. The system should apply alike to grain awaiting shipment at initial points and to that received at terminal points awaiting transportation or removal for milling.—*Chicago Herald*.

ELEVATOR INFLUENCE IN MINNEAPOLIS.

The elevators have made competition for cash wheat uncomfortably close for Minneapolis millers the last few months. The Peavey Company added largely to its terminal capacity, and other companies made additions, and this capacity had to be filled with wheat in competition with the millers who had to purchase daily for grinding. The result was cash wheat went to a premium, and it was held there. The elevator influence on the cash market has been decidedly bullish. There was a time when the producers wanted to rid themselves of the terminal elevators; they should rather give their encouragement to them, for they are price-raisers.—*Minneapolis Journal*.

UNCERTAIN GRAIN FREIGHT RATES.

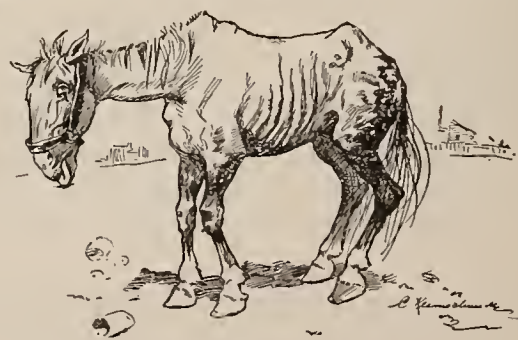
There has been scarcely any pretense of maintaining east-bound freight rates on grain during the present month, and their instability has been a source of great inconvenience and loss to grain merchants. The worst feature of the cutting has been the absence of any certainty about rates. Grain merchants complain that for some time past no two of the trunk line companies have named the same rate, and that no individual company has quoted a given rate for two days in succession. This sort of freight rate demoralization helps neither the transportation companies nor their patrons. It is the outcome of a competition that is always most ruinous in seasons of light freightage, when the business of the carriers is in the greatest need of prudent conservation. The interests of the trade would be better subserved by equable and stable carrying charges, impartially exacted from all shippers, than by irregular and uncertain rate cutting, which affords wide opportunity for discrimination and subjects the business to the risk of loss from the effect of competitive advantages to one set of shippers that are not accorded to others.—*Record, Philadelphia*.

WAREHOUSEMEN DEALING IN GRAIN.

The warehouseman who holds grain is in the position of a trustee. He has no right to speculate for his own benefit in the trust property. No trustee has a right to buy and sell the trust estate, or portions of it, for the purpose of putting the profit in his own pocket. If he makes gains by trading in the property the amount belongs not to himself but to the estate. There can be no honesty in the business of a warehouseman who deals in the grain belonging to other people stored in his warehouse.—*Chicago Herald*.

The temptation to take advantage of other owners of grain stored in his keeping is too great if the warehouseman have the opportunity of mixing it at his pleasure with grain belonging to himself in the same house and of selling on his own account such grain as he may select from the different bins, leaving the rest to those who hold receipts showing that certain quantities of grain are stored for them. Hence it ought not to be permitted. If the man or firm operating a public grain elevator wishes to buy and sell grain on his or its own account the latter part of the business ought to be conducted in a separate building and without any such connection as would admit of the spouting of grain from one house to the other. If this be not enough to satisfy the elevator men they should be compelled to choose between the two positions of public or private warehouseman.—*Chicago Tribune*.

The system of allowing elevator proprietors to handle their own grain, while they were pretending to handle it exclusively for the public, in accordance with the interpretation of the statute, has proved one of the greatest curses that has ever harassed the grain trade, and we make bold the statement that it has been a powerful factor in depressing and demoralizing the wheat market both in a speculative and legitimate sense. It is to be sincerely hoped, however, that the apparent travesty of the law by the artifices of the millionaires will not be allowed to continue; but that the true meaning of the statute governing warehousemen will be enforced and the evasions thereof stopped.—*Trade Bulletin, Montreal*.



OATS WANTED—INQUIRE WITHIN.—*Judge*.



The Philadelphia Commercial Exchange elected 21 new members during 1894.

Tickets of membership to the New York Produce Exchange are held at \$400.

Chicago Board of Trade memberships are offered at \$750 with dues for 1895 paid.

The annual meeting of the Superior Board of Trade will take place February 28, when officers will be elected.

W. D. Charde has been appointed secretary and W. H. Winants treasurer of the Kansas City, Mo., Board of Trade.

The proposition to purchase the building it occupies was again brought before the Milwaukee Chamber of Commerce, but it was rejected.

Milwaukee has only one public elevator—that of the C. M. & St. P. R. R. The houses belonging to Angus & Smith, Paine Bros. and Kraus & Co. are running private.

Negotiations have again been opened by the Philadelphia Commercial Exchange looking toward the securing of space on the main floor of the Bourse building.

The arbitration committee of the Philadelphia Commercial Exchange had only one case brought to its attention during 1894. That city deserves the fame of being the home of brotherly love.

The officers of the Toronto Board of Trade, as recently elected, are as follows: Stapleton Cadcott, president; G. B. Osler, first vice-president; Edward Quincy, second vice-president, and J. L. Spink, treasurer.

The defeat of Senator Washburn of Minnesota for re-election caused considerable "good feeling" on 'Change last month, for the Senator's efforts at anti-option legislation did not make him a very great favorite.

The new officers of the council of the Montreal Board of Trade, as elected at a recent meeting, are as follows: President, Jas. A. Cantile; first vice-president, John Torrance; second vice-president, John McKergow; treasurer, Chas. F. Smith.

At the annual election of the Boston Chamber of Commerce January 15, the following officers were elected: Wallace F. Robinson, president; John E. Soper, vice-president; F. N. Cheney, treasurer. Directors, E. J. Bliss, Clinton White, Jas. B. Webster and Geo. H. Lawrence.

At the annual meeting of the Montreal Corn Exchange Association, January 30, the old officers were elected as follows: D. G. Thomson, president; Wm. Stewart, treasurer; committee of management, James Allen, E. F. Craig, R. M. Esdaile, W. Hastings, Robt. Peddie, J. Robillard, A. G. Thomson.

The annual election of officers of the Milwaukee Chamber of Commerce is not held until April. Three candidates are already up for the secretaryship—W. J. Langson, the present secretary, W. J. Armstrong and J. W. Bass. C. M. Paine, now first vice-president, will probably be a candidate for the presidency.

The rules for grading hay as adopted by the National Hay Association so far as heard from have been officially adopted by the following commercial exchanges: The Pittsburg Grain and Flour Exchange, by the receivers of hay in the St. Louis market, and by the Cincinnati Chamber of Commerce.

For eleven consecutive years Secretary Geo. F. Stone has served the Chicago Board of Trade, and at the Board's annual meeting resolutions were passed tendering the thanks of the association to their worthy and honored secretary, and that a minute of the action be spread upon the records as a perpetual token.

Following is the list of officers of the Winnipeg Grain Exchange, elected at a recent meeting, for the year 1895: President, G. R. Crowe; vice-president, A. P. Stuart; secretary-treasurer, C. N. Bell; council, Robert Munn, W. Blackadar, S. P. Clark, A. McBean, R. P. Roblin, F. W. Thompson, J. Harris, D. W. Cumming, S. Spink, S. A. McGaw, W. W. McMillan.

Among the appointments of committees, inspectors, etc., of the St. Louis, Mo., Merchants' Exchange for the year are the following: Chairman for the board of grain inspectors for the east side of the river, C. O. Dutcher was re-appointed, T. E. Currie, assistant; seed and castor-bean inspector and weigher, W. F. Chamberlain; board of wheat inspection, H. F. Langenberg, chairman, G. W. Hill, C. H. Seaman, T. B. Morton, Roger P. Annan; corn, oats and rye inspec-

tion, Chris Sharp, chairman, John Mullally, F. W. Clemens, C. Bergman, P. P. Connor; barley inspection, C. Marquard Forster, chairman, Charles H. Teichman, Fred C. Orthwein, Henry Greve, Philip Brockman.

Among the new officers of the Chicago Board of Trade are the following: R. W. Rathborne, flour inspector; S. H. Stevens, inspector and registrar of flaxseed; L. A. Morey and W. McDougal, grain samplers. The warehouse committee is composed of Messrs. Ross, Hill and Kroeschell; the flour inspection committee of Messrs. Crocker, Montague, Reifsnider, Homer and Eckhart.

At the recent annual meeting of the Duluth Board of Trade the following officers were elected: B. C. Church, president; W. S. Moore, vice-president; J. N. McKindley, A. H. Burke and M. J. Forbes, directors. The committee on inspection is composed of H. H. Kenkel, L. H. Paige, T. A. Olmstead, A. H. Smith, F. E. Lindahl. Secretary Frank E. Wyman and Treasurer Fred W. Paine were re-elected.

At the recent annual election of the Baltimore Corn and Flour Exchange all the old officers were re-elected as follows: President, Charles England; first vice-president, J. J. E. Hinrichs; second vice-president, James C. Gorman; treasurer, George T. Kenly; secretary, Wm. F. Wheatley; assistant secretary, Harry A. Wroth; executive committee, Edgar Gillett, E. Clay Timanus, Douglas M. Wylie, J. H. Sherbert, Charles E. Parr.

Twelve memberships in the Chicago Board of Trade were forfeited for non-payment during 1894, the same number of forfeitures as in 1893. As it is assumed there are 300 members too many on the Board, it will take about thirty years to eliminate the surplus by the slow process of annual forfeitures. Of course a membership is never forfeited unless the claims against the certificate make it useless for the owner to continue to pay dues.

On January 29, what is said to be the largest single deal ever made on the Toledo Produce Exchange was consummated. William E. Brigham sold to Frank I. King 300,000 bushels of May wheat at 53½ cents. It was a case where both parties are supposed to have made money—the buying on orders to cover shorts and the selling to close a spread. The price at which the wheat was sold was ½ cent above the lowest point touched that day on 'Change.

The Buffalo Merchants' Exchange has reappointed Wm. Thurstone as secretary, Junius S. Smith weighmaster, and the usual committees. The new inspection committee is composed of Jas. H. Rodebaugh, Thomas Spaven, Chas. H. Gibson, George Watkins, John Smith, Henry D. Waters and Francis J. Henry; the grain committee is composed of George H. Wolcott, Daniel E. Newhall, Robert H. Sumner, Horace J. Harvey, Warren F. Chandler, Stephen M. Ratcliffe Jr., and Geo. C. McDonald. Secretary Thurstone has been in office over 30 years.

At the recent annual meeting the Philadelphia Commercial Exchange the following officers were elected: President, E. L. Rogers; vice-president, Clarence E. Steel; treasurer, Chas. R. Koch; directors (for two years), William C. Walton, James B. Canby, John Barker, Wm. R. Cornell, Frank Cascaden and E. H. Price. Samuel C. Woolman was also elected a director for one year to complete the term for which the late Amos Pennypacker was chosen. Mr. Rogers responded to the call of the members with a few well-chosen words, setting forth their duties for the year and thanking them for the honor they had shown him.

RICE IMPORTS AND EXPORTS.

According to the last report of the Bureau of Statistics rice aggregating 165,587 pounds, valued at \$6,556, was imported free of duty under reciprocity treaty with Hawaiian Islands during December, against 381,000 pounds, valued at \$14,868, in December preceding; and during the twelve months ending with December 8,871,987 pounds, valued at \$364,931, were imported, against 6,529,883 pounds, valued at \$254,209, imported during the corresponding months of the year preceding.

Of rice imported free of duty none was exported during December, against 20 pounds exported in December preceding; and during the twelve months ending with December 210 pounds were exported, against 14,151 pounds exported during the corresponding months of the year preceding.

Dutiable rice aggregating 11,916,958 pounds, valued at \$222,023, was imported during December, against 3,485,870 pounds, valued at \$50,471, imported in December preceding; and during the twelve months ending with December 111,490,741 pounds, valued at \$1,786,214, were imported, against 57,097,690 pounds, valued at \$950,915, imported during the corresponding months of the year preceding. Of dutiable rice we exported 635,896 pounds, valued at \$10,626, during December, against 913,419 pounds, valued at \$16,717, in December preceding; and during the twelve months ending with December 10,704,836 pounds, valued at \$176,359, were exported, against

11,400,129 pounds, valued at \$210,557, exported during the corresponding months of the year preceding.

Rice flour, rice meal and broken rice amounting to 4,278,255 pounds, valued at \$59,833, were imported during December, against 5,504,286 pounds, valued at \$83,212, in December preceding; and during the twelve months ending with December 63,485,521 pounds, valued at \$915,759, were imported, against 59,704,992 pounds, valued at \$975,711, imported during the corresponding months of the year preceding. Of imported rice flour, rice meal and broken rice none was exported in December and none in December preceding; and during the twelve months ending with December 987 pounds were exported, against none exported during the corresponding months of the year preceding.

OBITUARY

T. E. Brown of Newark, Ohio, member of the firm of Brown Bros., who carry on a grain and seed business at several points in Ohio, died recently. O. T. Brown of Fosterla will continue the business.

C. B. Hancock, the last remaining partner of the firm of W. H. Story & Co., grain dealers at New York, died January 21. The Produce Exchange adopted resolutions paying tribute to their departed member and friend.

Senator J. D. Thayer, grain and commission merchant at Warsaw, Ind., died January 28 at the age of 50 years. Senator Thayer had been prominently connected with the affairs of his town for many years and his loss is deeply regretted.

J. H. Cabaniss, of the grain and hay firm of Cabaniss & Lunsford, Petersburg, Va., died recently. He was a prominent business man, and was highly honored for his fair and generous dealings. The business of the firm will be carried on under the name of Charles Lunsford & Co.

Geo. W. Powers, a director of the Milwaukee Chamber of Commerce and a young man highly esteemed in the grain trade of that city, died January 10 at the age of 36. Mr. Powers had been connected with E. P. Bacon & Co. since 1877, having been a partner in that well-known firm since 1890.

Guy C. Griswold, of the grain firm of Knopp & Griswold, owners of several large elevators in the Illinois Valley, and a member of the Chicago Board of Trade, died at his home at Ottawa, Ill., January 21, at the age of 53. He was well known in the grain trade, and his death will be regretted by all who knew him.

Wm. M. Coon, of the well-known firm of J. F. Zahm & Co. of Toledo, Ohio, died February 11. Mr. Coon went to Toledo in 1856, and in 1888 started in the grain business with Hallaran & Zahm. The Produce Exchange passed resolutions of grief at his death and sympathy for his family, paying tribute to his stainless and honorable career.

HE TRIED TO GET HIS CUSTOMER'S BUSINESS.

To demonstrate the lengths to which some traders will go in competing for the business not only of their rivals, but that of their own customers, we may mention the fact that a Western shipper, who had been supplying a Montreal firm with grain, attempted to take the trade from the latter by shipping the same class of goods to the same points east of this city to which the Montreal firm had ordered them shipped on through bills. But as the Western shipper was unable to find out the customers of his Montreal customer, he sent on a lot of oats to Halifax, N. S., expecting that when the dealers there found out from whom it came they would all write him and make him firm offers, and he would therefore have the Halifax trade in his own hands and the Montreal firm would be shelved. Things, however, turned out quite different to the expectations of this seeker for new business, as he had to borrow Dun's Mercantile Agency book and write to all the Halifax firms, asking what they would give for his oats; but no one seemed to want them, and before this Western shipper could dispose of them he had to solicit the services of his old-time Montreal customer who had thrown so many favors in his way. After the commission of the Montreal firm, however, had been paid, there was no profit left the Western man on his first Halifax shipment; but he must have felt cheap, indeed, when he had to put his goods into the hands of the very firm he was trying to cut out.—*Trade Bulletin, Montreal.*

The grain inspectors found a number of dressed hogs in a car of oats arriving yesterday. By accident the railroad employes overheard the inspectors discussing the find and the result will be that the shipper will have to pay a largely increased freight bill.—*Commercial Record, Duluth.*

CROP : CONDITIONS.

WISCONSIN, MERRILLAN, JACKSON CO.—Wheat is getting scarce in our neighborhood. FRED FRANKIGER.

NEBRASKA WINTER WHEAT.—A conservative estimate of the damage to winter wheat and rye in Nebraska caused by recent high winds places the loss at 15 per cent.

INDIANA, SEYMOUR, JACKSON CO.—There is considerable wheat here in farmers' hands which will be held until the snow disappears and reveals the appearance of the growing crop. Ex.

TENNESSEE, GLENLOCH, MONROE CO.—Wheat is looking nice and green in this vicinity, and thus far prospects for a crop are good. The weather is mild and farmers are plowing for corn. T. JONES.

MINNESOTA, RED WING, GOODHUE CO.—It is very probable that the majority of the farmers in this county will sow barley as their principal crop the coming season, and wheat, rye and oats will be obliged to occupy second place. REPORTER.

ALABAMA WINTER OATS.—The crop of winter oats in this state will have to be replanted as the entire crop has been killed by the recent frost. The ground was frozen solid for three inches, and farmers say that not a grain of oats can survive. F. W. WEBER.

KENTUCKY, DYCSBURG, CRITTENDEN CO.—An increased acreage of wheat was sown in this section last fall. We are having unusually cold weather and the crop may be very much damaged although it has been covered almost continually with snow for the past five weeks. Stocks of wheat in farmers' hands are very small. F. C. DYCS & Co.

MICHIGAN.—The Michigan crop report for February says: Cold weather prevailed during January. Snow fell in the early part of the month in sufficient amount to afford good protection to the wheat crop. The average depth of snow in the Lower Peninsula on January 15 was about eight inches, and at the end of the month there had been no reduction. In reply to the question, "Has wheat during January suffered injury from any cause?" 192 correspondents in the southern counties answer "yes" and 293 "no;" in the central counties 34 answer "yes" and 142 "no," and in the northern counties eight answer "yes" and 90 "no." The total number of bushels of wheat reported marketed by the farmers in January is 1,061,838 bushels, and in the six months, August to January, 7,296,941 bushels, which is 1,952,971 bushels less than reported marketed in the same months last year. At 20 elevators and mills from which reports have been received, there was no wheat marketed during the month.

BRITISH BARLEY TRADE.

The decreased demand for barley has most certainly exerted an influence upon the price of wheat, notwithstanding the existence for years of the fact of prime malting barleys securing a higher price than good grinding wheats, says *Bell's Weekly Messenger*.

But if second-rate barley had retained a better price, would wheat have fallen so low?

Would barley of any class have become so cheap, if brewers had maintained demand instead of decreasing it to the alarming extent their known use of substitutes makes certain? Two million hundredweights of sugar displace a million quarters of grain. Another million quarters of corn displace the use of a further million quarters of barley, so that sugar and corn take the place of 2,000,000 quarters of barley-malt that should have been used by brewers alone this year. Seeing that the whole amount of malt, corn and sugar brewed is only 10,000,000 quarters per annum, the difference is a very serious one. No sensible man can deny its importance, or suggest that its influence is not extreme.

Not only can it account for the ruinous fall in the price barley fetches, but it has helped the still more disastrous drop in the price of wheat. There is a great deal of suggestiveness in the last straw breaking a camel's back—of course a good many other straws have to be piled on first, but the last straw is the fatal one. How far so vast a decrease in demand by brewers for barley affected wheat is an interesting problem. It would be sheer stupidity to contend that it has no weight. It is a very heavy straw. The consumption of beer has not decreased; the whole change is one that is determined by the brewers themselves either from choice or necessity. The question is a complex one, and the brewers say that no further change should be demanded until the question has been subjected to fullest inquiry. They would prefer the appointment of a royal commission. This, however, is too transparent. Anyone knows that the brewers, as a class, are very fully organized, and that they have not only all the power that good trade combination invariably exerts, but the means and the skill to use their advantages to the utmost. The array of expert and scientific evidence they would hurl at an un-

fortunate body of well-meaning gentlemen would be simply phenomenal.

One of the brewers' organs has been unusually polite to the writer of these columns. It suggests that I have only one of two aims in view. Either to add to the cost of materials used by brewers, or to restrict brewers to the use of barley only. As any honest, straightforward brewer will frankly admit that he would not object to higher prices, and as a fact, would sooner pay more for sound good barley than he now does, it is highly probable that few would suffer if the price of barley showed a tendency to rise rather than the steady declension marked week after week from the early part of the season. Nor is there any wish to interfere with brewers' freedom. Let them use what material they please, or may find pays best, only all such material should be made to pay as much or even more than the barley-malt it displaces, and all such beer should be sold only as beerine.

1894 is a memorable year in the trade annals of our country. Some of the changes that stand recorded are epoch marking. Not the least remarkable hereafter, although less noticed at the time, will prove to be the strong and rapidly increasing resistance to the use of malt substitutes in beer on the part of barley growers, factors and merchants, maltsters, and still more of the general body of consumers—the great British public that likes to see fair play. The true demand is for common fairness or fair play. In taking stock, what is the record for the year?

Unparalleled low prices.

A large crop almost unsalable.

Enormous importation of foreign-grown foodstuffs. Immense increase in the use of substitutes.

A GRAIN INSPECTION LAW PROPOSED FOR WASHINGTON.

Representative Bull of Pullman, Wash., has launched his bill for a warehouse commission. Its purpose is to regulate grain warehouses, and the inspection, weighing and hauling of grain, and has been carefully prepared.

The bill provides that there shall be three warehouse commissioners, a decision of a majority to be the decision of the board. The commissioners are to be appointed by the governor, each for two years, and to be from different political parties. Within 30 days after the act is passed it becomes incumbent upon the governor to appoint the commissioners, who shall file \$10,000 bonds and hold their office until Jan. 2, 1897. Their salary is fixed at \$1,500 per annum each, and a secretary at \$1,200 is provided for. The office and furniture shall be furnished by the state. The commissioners and their assistants are given the right of riding on all railroad trains in the state free in the performance of their duties concerning warehouses.

The act provides that all elevators or warehouses located at Tacoma, Seattle and Spokane in which grain is stored in bulk and the grain of different owners is mixed together, doing business for a compensation, are to be known as public warehouses. The owner of a public warehouse is compelled before transacting any business to procure a license from the warehouse commissioners on an application giving all the details of location, ownership and control of same. The person receiving the license is required to furnish a bond of from \$10,000 to \$50,000 for faithful performance as a public warehouseman. The duty of public warehousemen is to receive for storage all grain, dry and in a suitable condition for warehousing, that may be tendered to him in the usual way, not making any discrimination between persons desiring to avail themselves of warehouse facilities, the grain in all cases to be inspected and graded by a competent inspector and to be stored with grain of a similar grade. The mixing of grain with other grades without the permission of the owner is prohibited. When transportation and other charges have been paid the warehouseman is required to issue numbered receipts which shall show the date of the receipt of the grain, the quantity and the inspected grade, and that it is to be stored with wheat of similar grade: that it is delivered upon the return of the receipt properly indorsed and upon payment of proper charges. Upon the delivery of grain on receipt the certificate is canceled. No warehouseman shall insert in any receipt issued by him any language in any wise limiting or modifying his liabilities or responsibilities. Warehousemen are required to furnish the commissioners, when requested, a statement of the condition of the business. Daily reports shall be furnished to the registrar of the amount and kind of grain received and delivered, the secretary of the commission being registrar. Rates for storage are to be published during the first week of August of each year in the most prominent paper where the public warehouse is located. Warehousemen are not held for loss by fire or heating if proper care is exercised. When grain is found to be out of condition public notice shall be given through the newspapers. Grain out of order that is not removed by the owner within two months can be sold at auction.

The commissioners shall appoint in all cities where there is a state inspection of grain a state weighmaster and necessary assistants, who shall receive a fee fixed by the commissioners, and furnish \$5,000 bonds. The weighing shall be under rules adopted by the com-

mission. Where weighmasters are refused access to scales of warehousemen they shall forfeit \$100 in each case, to be recovered before a justice and paid to the state treasurer for the grain inspection fund. The chief inspector holds office for two years; and gives a bond of \$10,000. Deputy inspectors shall be appointed for each city where there is a public warehouse, and one of whom in each of the cities of Spokane, Tacoma and Seattle shall be known as chief deputy. Such deputies give \$5,000 bonds. The chief inspector can remove deputies at pleasure. Inspectors are prohibited from being interested in the buying, selling or shipping of grain, and may be removed by the commission on complaint, substantiated by proof. Where a person assumes to act as inspector without authority he is subject to a fine of \$50 to \$100. For neglect of duty an inspector is liable to a fine of \$100 to \$1,000 and imprisonment for 30 days to one year, or both. The charge for inspection is a lien. The decision of the inspector is final unless an appeal is taken to the warehouse commission. Where an owner or consignee is dissatisfied with the inspection of any lot of grain it can be withheld from going into a public warehouse by giving notice to the person or corporation in whose possession it shall be at that time, whether consigned to a public warehouse or not, the grain in cars to be removed in 24 hours. The warehouse owners must obey orders of owners of grain as to delivery. The commissioners shall establish Washington grades of wheat. The commission shall maintain a constant supervision over the grain interests of the state; to supervise the handling, inspection, weighing and storage of grain; to establish rules and regulations for the same and for the management of all public warehouses; to investigate all complaints of fraud or oppression in the grain trade and to correct the same as far as may be in their power. Such rules and regulations are to be published in a daily paper in Spokane, Tacoma and Seattle. All moneys collected by grain inspectors and other officers shall be paid into the state treasury, who shall keep a separate account and pay the same on the order of the commissioners. The attorney general is the ex-officio attorney for the commission, and the county attorney shall prosecute criminal prosecutions against warehousemen. Selling grain by sample regardless of grade is not prohibited.

A GRAIN MIXER IN A LIVERPOOL ELEVATOR.

One of the extensive institutions of the Liverpool grain trade is the Grain Storage Company, writes the London correspondent of the *Northwestern Miller*. By appointment with the manager, Mr. Christie, I went down to Alexandra docks to have a look at the plant, which consists of dock sheds and a large silo warehouse, with a capacity of 36,000 tons. The company is constructing another warehouse, to have a capacity of 30,000 tons. The silo house has 250 silos, 15 half silos and 52 quarter silos, or delivery bins. In cross section, the silos resemble a beehive, being hexagonal in shape. It was supposed that by this construction the walls would support each other, but while they do this one way, it was found that they had too slight resistance to an outward lateral pressure, necessitating the use of iron stay-rods. Another difficulty that the company encountered was in making delivery of certain kinds of wheat, particularly Californian, so that the last lot delivered out was equal to the first. The chaff and light stuff being slower to run out, was pretty much all mixed with the last delivery. To obviate this a simple and ingenious contrivance, called the Sprague device, was adopted. A chute is built up one side of the silo, having openings at intervals all the way up. At the bottom of the silos a small chute with openings allows grain from the bottom to run off. These two streams run together in a spout, and thus the wheat runs off from the top and bottom simultaneously. The peculiar thing about this device is that the wheat descending the vertical chute always comes from the top of the grain, though there are no slides to close some of the openings. It seems that the force of the falling grain shuts out the grain at the lower levels from entering the chute. I observe by the circular that this device was patented in the United States July 3, 1889, so it may have been introduced there, but if so, I have failed to hear of it. So perfectly does it operate that Mr. Christie tells me he has seen red wheat and white wheat put in an experimental apparatus, one at the top and one at the bottom, leave it thoroughly mixed. The device takes no room to speak of, and I do not see why it would not be a good thing in all mills and elevators.

The new warehouse of the company will not be on the silo system, but will be divided by floors, with arrangements for delivering wheat on any floor, or taking it from any floor, and it will have the advantage that grain can be delivered out of it without re-elevating, as is necessary in the silo house. The company has nine barges for taking wheat from vessels, several marine elevators for unloading from barges in bulk, and a series of belt carriers running through a sub-way.

The Grain Dealers' Association of the Cumberland Valley held a meeting January 10 for the transaction of the customary business.

Fires, Casualties, Etc.

The Wichita, Texas, Mill and Elevator were destroyed by fire recently.

Henry Humphrey was recently suffocated in a bin of malt at Buffalo, N. Y.

R. S. Hodgins' grain elevator and warehouse at Lucan, Ont., has been burned.

A grain warehouse near Modesto, Cal., was recently destroyed by fire at a loss of \$15,000.

Wm. F. Werner's brewery at West Elizabeth, Pa., was partially destroyed by fire January 20.

B. C. Beach & Co.'s elevator office at Bloomington, Ill., was badly damaged by fire February 1.

Nicholas Weid's brewery at Rush City, Minn., sustained damage by fire amounting to \$2,500 recently.

T. Michael & Son's elevator at Boyden, Iowa, was destroyed by fire recently with 10,000 bushels of grain.

The Grand River Manufacturing Company's flax mills at Elora, Ont., was destroyed by fire January 31.

A grain elevator at Moweaqua, Ill., was burned last month with considerable grain. The loss was \$20,000.

The Huskins Elevator at Voss, N. D., was burned February 6. It was full of grain, and the loss will be heavy.

Owing to a heavy weight of snow J. B. Stevens' grain warehouse at Tacoma, Wash., caved in recently.

An elevator and other buildings at Williamstown, Mass., were destroyed by fire January 14 at a loss of \$23,000.

The Crescent Oil Mill near Little Rock, Ark., was destroyed by fire recently at a loss of \$75,000. Partly insured.

The Serth Elevator at Lentzburg, Ill., was burned on the morning of February 8. Loss, \$5,000; insurance \$1,000.

A. F. Hathaway's barn in Sand Creek township, Iowa, containing 1,400 bushels of corn, was destroyed by fire recently.

James Bell's brewery at Portage la Prairie, Man., was destroyed by fire January 26, at a loss of \$15,000; insurance \$5,300.

E. H. Watkins' ginhouse and mill near Rutledge, Ga., was burned January 26 together with 5,000 bushels of cotton seed.

The P. Lieber Brewing Company of Indianapolis, Ind., recently sustained damage by fire to its plant amounting to \$25,000.

Miller & Vrooman, dealers in grain and hay at Albany, N. Y., were burned out recently. The loss was covered by insurance.

J. V. Allen & Son's elevator at Virginia, Neb., was burned February 8, together with 3,000 bushels of grain. Loss \$6,000; insurance \$3,000.

F. D. Randall & Co., commission dealers in grain, bay, etc., recently sustained damage to their stock by water. The loss was fully covered by insurance.

W. J. Riley and H. E. Kinney's hay storehouse at Indianapolis was recently destroyed by fire together with about 300 tons of baled hay valued at \$2,500. Insured.

Charles B. Briggs, the Kansas City Board of Trade speculator, was arrested recently and taken to the insane asylum at St. Joseph. His mind had become unbalanced.

W. M. Hodge & Co.'s elevator and feed mill at Williamstown, Mass., was burned January 14, at a loss of \$21,000; insurance \$16,100. The fire started in the engine room.

The boilers in Henning's brewery at Mendota, Ill., exploded January 25, causing the death of seven men and injuring six. The building was destroyed, and the loss will be \$100,000.

An empty elevator belonging to the Plymouth Roller Mill Company of Le Mars, Iowa, burned recently. The building was an old landmark, having been built in an early day. The loss was fully covered by insurance.

The elevator and mill of the Scottsville Milling Company at Scottsville, N. Y., were burned January 9. The elevator contained about 20,000 bushels wheat which was destroyed. Total loss \$65,000; insurance \$41,000.

The Johnson-Brinkman Commission Company's elevator at Kansas City, Mo., was partially wrecked by a boiler explosion on the morning of January 24. The engine house was demolished and two cars of shelled corn were scattered over the premises. The explosion

occurred through an error. The fireman put the fire under the wrong boiler, and while he was away at breakfast the explosion took place. The loss is \$5,000.

The Northwestern Elevator at St. Thomas, N. D., containing over 30,000 bushels of wheat and a large quantity of barley, was burned January 18. The loss was covered by insurance.

Geo. C. Clow's grain warehouse at Lisbon, N. D., was burned on the night of January 23 together with about 200 bushels of wheat. Loss about \$500, which was covered by insurance.

The Omaha Elevator Company's elevator at Barnes-ton, Neb., containing several thousand bushels of wheat, was burned January 26. The loss is \$8,000, partially covered by insurance.

A small blaze in G. Stronk's elevator at Sheboygan, Wis., caused a damage of about \$25 on January 21. A serious loss would have resulted had not the fire been discovered in time and put out.

The Magnolia Warehouse at Louisville, Ky., was considerably damaged by fire January 25, and on its contents, consisting of bay, flour and farming implements, was a loss amounting to \$14,000.

E. H. Pbelps' elevator at Fort Dodge, Iowa, occupied by Smith & Burr as a mill and feed store, was destroyed by fire February 2, together with grain, flour and feed. Loss \$10,000; insurance \$9,800.

J. M. Danelz's elevator and mill at Swift Falls, Minn., were burned January 23. The elevator contained about 4,500 bushels of wheat, and is said to have been uninsured. They will probably be rebuilt.

The G. H. Dulle Milling Company's elevator and mill at Jefferson City, Mo., were destroyed by fire January 16, together with 35,000 bushels of wheat. Loss \$85,000; insurance \$65,000. They will be rebuilt.

Callahan & Son's hay warehouse at Louisville, Ky., having 100 cars of specially selected hay in store, took fire January 24 and burned for several days, until everything was destroyed. The loss is covered by insurance.

E. Decker's large hay pressing house at Abnapee, Wis., was destroyed by fire recently together with all the machinery and about 300 tons of hay. The loss is estimated at about \$4,000, on which there was only a small insurance.

Henry Stringerman's five storage buildings at Coeymans, N. Y., which were filled with grain, hay, feed, flour, etc., were destroyed by fire February 2. About half the contents were saved. The loss was \$35,000; insurance \$17,000.

George Schilling, a prominent citizen of Peru, Ind., and one of the largest grain buyers of Northern Indiana, shot himself through the head recently and died instantly. The cause is thought to have been business depression.

Homer M. Murphy's elevator at Morrice, Mich., was destroyed by fire January 16, together with 2,000 bushels of farmers' wheat, upon which there will be a total loss. The loss for the elevator company is about \$3,000, with only a small insurance.

George R. Jackson, aged 25 years, son of John Jackson, the grain elevator man of St. Louis, Mo., who killed himself in 1889, committed suicide January 22 by banging. Insomnia is the only known cause for his act, for he was wealthy and was a quiet young man. He left a note, but it explained nothing.

Geo. P. Webber, engineer at the Portsmouth grain elevator at Newburyport, Mass., had a narrow escape from death recently. He was working about the engine when the left side of his jumper was drawn into the cog wheels. He was slowly drawn toward the wheels, when the cloth in the jumper gave way and his life was spared.

Reuben Smith, an employe of the Wellington Grain Company at Milford, Ill., recently met with a bad accident. While running a wagon load of corn down the driveway, the wagon got beyond his control and he slipped and fell, the wheel passing over his right leg, breaking it just below the knee and forcing the bone through the flesh.

The Model Roller Mills and elevator at Bonne Terre, Mo., the property of U. E. Fite and leased by Keith & Moran, were destroyed by fire on the night of January 24 together with 5,000 bushels of wheat, a quantity of flour, etc. The total loss on the Fite estate, including that on lumber sheds, amounts to \$17,000; Keith & Moran's loss on grain and flour, \$4,000. No insurance.

Charles Mercer, a member of the firm of Kissinger & Mercer, wholesale grain dealers at Reading, Pa., recently committed suicide by inhaling gas from an open jet. As the odor of gas filled Kissinger & Mercer's building a search was made and Mr. Mercer was found in an armchair with his hat and overcoat on, dead. He was 60 years old and well known through the Schuylkill Valley.

Hartley Bros. of Remington, Ind., write: "We value the AMERICAN ELEVATOR AND GRAIN TRADE very highly and think every grain man in the country should be a regular subscriber."

PERSONAL

David Clark is buying grain at Wadena, Ind., for Remington dealers.

C. B. Mattoon has taken charge of the office of Wm. Crowell & Co., dealers in grain and lumber at Raber, Ind.

W. T. Keyes, formerly of Riverdale, Neb., has taken charge of the Barr Elevator at Shelton. Mr. Barr contemplates moving to the Pacific Coast in the spring.

A. B. Taylor, the grain dealer of Minneapolis, Minn., has gone to Knoxville, Tenn., for his health. If the climate proves salubrious he will remain and go into business.

Jas. W. Blaine will act as agent for Parrish & Lindsay, in their new branch business at South Edmonton. Mr. Blaine has managed the same firm's elevator at Beresford, Man., for the past four years.

Edwin L. Rogers, who has for the second time been chosen president of the Philadelphia Commercial Exchange, has been engaged in the grain business of that city since 1863. For 30 years he has been in business for himself, and has maintained a reputation which is beyond question.

J. M. Axley, formerly manager of the hay department for the Dayton Commission Company, grain dealers of Kansas City, Mo., has been engaged in the same capacity by the Purcell Grain Company. He has gone to Nebraska to extend his firm's business in different sections.

Edward P. Bacon, of the well known grain commission firm of E. P. Bacon & Co., Milwaukee, Wis., was recently married to Mrs. Ella Beard at Pellham Manor, N. Y. They will go on a trip to Egypt and the Orient, and expect to be absent about six months. Mr. Bacon is one of the oldest commission men in the northwest, and is ex-president of the Chamber of Commerce of Milwaukee.

SEED EXPORTS AND IMPORTS.

Seeds valued at \$532,456 were exported during December, according to the last report of the Bureau of Statistics, against an amount valued at \$1,138,527 exported during December, 1893; and during the twelve months ending with December seeds valued at \$3,403,505 were exported, against an amount valued at \$7,204,897 exported during the corresponding months of 1893.

Clover seed aggregating 4,404,854 pounds was exported during December, against 7,500,178 pounds in December, 1893; and during the twelve months ending with December 26,479,395 pounds, valued at \$2,541,869, were exported, against 33,858,986 pounds, valued at \$3,472,049, exported during the corresponding months of 1893. Cotton seed aggregating 2,417,196 pounds was exported during December, against 1,040,275 pounds in December, 1893; and during the twelve months ending with December 8,185,382 pounds, valued at \$60,907, were exported, against 3,237,417 pounds, valued at \$30,023, exported during the corresponding months of 1893.

Ten bushels of flaxseed were exported in December, against 265,690 bushels in December, 1893; and during the twelve months ending with December 13,089 bushels, valued at \$15,542, were exported, against 2,260,026 bushels, valued at \$2,674,632, exported during the corresponding months of 1893.

Timothy seed aggregating 739,331 pounds was exported in December, against 1,133,985 pounds in December, 1893; and during the twelve months ending with December 7,025,319 pounds, valued at \$336,799, were exported, against 10,151,494 pounds, valued at \$638,637, exported during the corresponding months of 1893. Other seeds aggregating an amount valued at \$59,574 were exported in December, against an amount valued at \$54,193 exported during December, 1893; and during the twelve months ending with December other seeds valued at \$441,388 were exported, against an amount valued at \$389,506 exported during the corresponding months of 1893.

Flaxseed aggregating 810,002 bushels, valued at \$1,025,851, was imported during December, against 2 bushels in December, 1893; and during the twelve months ending with December 2,298,497 bushels, valued at \$2,893,731, were imported, against 217,526 bushels, valued at \$253,833, imported during the corresponding months of 1893. Other seeds valued at \$138,782 were imported during December, against an amount valued at \$75,037 imported during December, 1893; and during the twelve months ending with December other seeds valued at \$545,081 were imported, against an amount valued at \$494,744 imported during the corresponding months of 1893.

WATERWAYS

The steamer S. S. Curry was recently loaded at the Illinois Central Elevator at Chicago with a cargo of 246,603 bushels and 14 pounds of oats, the largest cargo of oats on record.

The British ship Andola, which sailed from Tacoma Aug. 7, 1894, with 71,176 cents of wheat, valued at \$60,000, was reported ashore near Falmouth, January 31, and will probably be a total loss.

The weakest argument ever used in favor of a canal project is that the new waterway will take the traffic of another canal. Such an argument is often used by the promoters of impossible schemes.

The Lake Erie and Ohio River Ship Canal is still an object of discussion, notwithstanding all rivals. Pittsburg wants it; so do the engineers, and an appropriation bill will be pressed in the House of Representatives.

The bill providing for an appropriation of \$9,000,000 for the improvement of the New York canals, in accordance with the recommendation of the recent canal men's convention, has been introduced in the New York Assembly.

The 21-foot channel through the waters of the great lakes between Chicago, Duluth and Buffalo, work on which was commenced in 1893, is now two-thirds completed. It was a great undertaking, but its benefits to navigation will justify its execution.

The Commissioner of Navigation of New York says that lake navigation business stood the strain of the past year better than that of any part of the country, or the world for that matter. The increase in the tonnage and general business of the lakes has been something phenomenal.

The United States Senate has passed the Nicaragua Canal bill, which provides for the capital stock of the Maritime Canal Company of Nicaragua, the issuance of bonds, etc., the United States to receive \$70,000,000 in stock, and the appointment by the president of ten of the fifteen directors.

Statistics show that the cost of traffic via canals and the great lakes is gradually narrowing down to a certain minimum. In 1887 the cost of carrying freight via the Soo Canal was 2.3 mills per ton per mile, in 1890 1.3 mills, in 1893 1.1 mills. The average distance freight was carried in 1887 was 811.4 miles, in 1890 797.2 miles and in 1893 831.9 miles.

All sorts of things are being predicted for the Chicago Drainage Canal in its effects on lake levels. The bare possibility of the great lakes being drained to the ocean raises many interesting problems, and it has been said that the Chicago Canal will be one of the most interesting and gigantic experiments which have ever been made in diverting the course of nature's great waterways.

Another canal project looms up, and in Canada, a country that is steadily losing money through its waterways. It is proposed to construct a waterway from Parry Sound to Ottawa River, a distance of about 120 miles. It is argued that with such a route a vessel could pass from the Soo or the Mackinac Straits to Montreal in less time than is now required to reach Buffalo or the entrance of the Welland Canal on Lake Superior. Of course this knocks out the St. Lawrence River route.

A bill has been introduced in the House of Representatives, incorporating the Maritime Canal Company of North America, and to authorize the construction of navigable canals through the United States between the great lakes, the St. Lawrence River and tide-water in the Hudson River. The company's head office is to be in New York City. Its capital stock is to be \$10,000,000. It may have an interest-bearing debt of \$20,000,000, and is empowered to construct the works as stated above.

Traffic on the Erie Canal gave to New York nearly 94 per cent. of its grain receipts last year. During the seven months of last season's business the receipts of grain at New York by canal amounted to 26,098,000 bushels, by river and coast 2,826 bushels, by rail 1,723,275 bushels, a total of 27,824,101 bushels. The percentage of the receipts by each route was, canal 93.80, river and coast .01, rail 6.19. The importance of the Erie Canal, the necessity of keeping it improved and an up-to-date waterway, could not be more clearly shown.

In his report to the New York Legislature, State Engineer Adams says that the many wonderful achievements of recent years in the development of electricity as a motive power inspire the hope that it may soon be made applicable to the propulsion of canal boats at a cost that would render its use practicable and profitable to all concerned. The fact is, the excessive weight and expense of the best storage battery which science has as yet devised, and which would be sufficiently powerful to meet the needs of

this service, seem to exclude such an appliance from serious consideration at this time. Motors placed on the boats and made to operate the common form of screw propellers will not accomplish any appreciable saving of either weight or space over a steam engine and boiler, and in many respects would be decidedly inferior thereto.

Indiana wants a ship canal, and to that end the commission on railways and canals of the House of Representatives is considering a resolution for a survey for a waterway to connect the headwaters of the Wabash with Lake Michigan. The Rock Island and Hennepin Canal was supposed to supply a route between the lakes and the Mississippi River, but the new scheme provides a route that will make that useless, and it is argued that the various other proposed routes between the Ohio River and the lakes are altogether impracticable.

As an argument for the deep waterway from the great lakes to the Atlantic, it has been pointed out that Montreal is 250 miles nearer Liverpool than New York, and that the water route to the head of the lakes is 163 miles shorter than from New York. When the Soulages Canal is completed, Canada will have a 14-foot waterway from the head of the lakes to the seaboard. It is largely a matter of speculation as to what effect a waterway route from the lakes to the Atlantic will have on the large amount of freight that is shipped from the Northwest.

A bill has been introduced in the Senate of Pennsylvania providing for the incorporation and regulation of ship canal companies. It is a very comprehensive act, and is equally applicable to the proposed Philadelphia ship canal as it is to the Ohio ship canal. In addition to the enabling clause, it provides for the consolidation of any company incorporated under this act with another company, wholly within or without the state, which has been incorporated for the same purposes. It confers practically the right of domain, but provides for compensation for the property damaged by its right of way.

A correspondent at Buffalo, N. Y., writes that there is a quantity of Manitoba wheat now in elevators there, owned by Canadians who desire to have it shipped back to Canada free of duty. To that end they have appealed to their government. It is ruled, however, that as most of the grain in question was shipped from Port Arthur or Fort William to Buffalo in American bottoms, to permit it to be re-imported into Canada would be equivalent to a recognition of the right of a United States vessel to carry Canadian produce from one Canadian port to another, thus breaking down their coast laws and restrictions, and consequently the grain cannot be re-imported free of duty.

The New York state engineer and surveyor has sent his report to the legislature, recommending, among other canal improvements, the deepening of the Erie and Oswego canals to nine feet and the Champlain Canal to seven feet; the lengthening of all locks to accommodate two boats at a time, with proper hydraulic machinery, not only for drawing the boats in and out of the locks, but also for operating the gates; the combining into one quick-acting, high-lifting lock in place of a series; greater speed and economy in towing; increasing the capacity of the boats, and reducing the cost of canal maintenance by the introduction of modern methods and appliances. It is also recommended that an appropriation be made for the continuation of the experiments with electricity on canals. It would be as wise to recommend mule power, which would prove more economical and practicable.

IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.

The total value of breadstuffs imported during December, according to the last report of the Bureau of Statistics, was \$277,519, against an amount valued at \$245,974 imported in December preceding; and during the twelve months ending with December breadstuffs valued at \$2,249,376 were imported, against an amount valued at \$2,344,726 imported during the corresponding months of the year preceding.

Barley aggregating 1,628,291 bushels, valued at \$670,495, was imported during the twelve months ending with December, against 1,264,922 bushels, valued at \$573,846, imported during the corresponding months preceding. Corn aggregating 5,384 bushels, valued at \$2,703, was imported during the twelve months ending with December, against 2,201 bushels, valued at \$1,508, imported during the corresponding months preceding.

Oats amounting to 170,866 bushels, valued at \$44,907, were imported during the twelve months ending with December, against 17,692 bushels, valued at \$7,709, imported during the corresponding months preceding. Rye amounting to 12,759 bushels, valued at \$6,047, was imported during the twelve months ending with December, against 8,505 bushels, valued at \$6,801, imported during the corresponding months preceding. Wheat aggregating 1,396,789 bushels, valued at \$818,872, was imported during the twelve months ending with December, against 1,104,788

bushels, valued at \$768,964, imported during the corresponding months preceding.

Of imported breadstuffs an amount valued at \$4,426 was exported during December, against an amount valued at \$15,735 exported in December preceding; and during the twelve months ending with December breadstuffs valued at \$212,260 were exported, against an amount valued at \$185,449 exported during the corresponding months of the year preceding. Imported barley aggregating 19,305 bushels, valued at \$9,672, was exported during the twelve months ending with December, against 40,093 bushels, valued at \$20,050, exported during the corresponding months preceding. Imported wheat aggregating 325,522 bushels, valued at \$184,401, was exported during the twelve months ending with December, against 213,892 bushels, valued at \$150,654, exported during the corresponding months of the year preceding.

GRADES OF HAY AND STRAW ADOPTED BY THE NATIONAL HAY DEALERS' ASSOCIATION.

The National Convention of Hay Dealers at Cleveland, Ohio, January 22, adopted the following rules for governing the grading of hay and straw:

CHOICE TIMOTHY HAY—Shall be timothy not mixed with over one-twentieth other grasses, properly cured, bright natural color, sound and well baled.

No. 1 TIMOTHY HAY—Shall be timothy not more than one-fifth mixed with other tame grasses, properly cured, good color, sound and well baled.

No. 2 TIMOTHY HAY—Shall include all timothy not good enough for No. 1, not over one-third mixed with other grasses, sound and well baled.

No. 3 TIMOTHY HAY—Shall include all hay not good enough for other grades, sound and well baled.

No. 1 CLOVER MIXED HAY—Shall be timothy and clover mixed, with at least one-half timothy, good color, sound and well baled.

No. 2 CLOVER MIXED HAY—Shall be timothy and clover mixed, with at least one-third timothy, reasonably sound and well baled.

No. 1 CLOVER HAY—Shall be medium clover, not over one-twentieth other grasses, properly cured, sound and well baled.

No. 2 CLOVER HAY—Shall be clover, sound, well baled, not good enough for No. 1.

No. 3 GRADE HAY—Shall include all hay badly cured, musty, stained, or in any way unsound.

CHOICE PRAIRIE HAY—Shall be upland hay of bright color, well cured, sweet, sound and reasonably free from weeds.

No. 1 PRAIRIE HAY—Shall be upland, and may contain one-quarter midland of good color, well cured, sweet, sound and reasonably free from weeds.

No. 2 PRAIRIE HAY—Shall be upland of fair color, or midland of good color, well cured, sweet, sound and reasonably free from weeds.

No. 3 PRAIRIE HAY—Shall be midland of fair color, or slough of good color, well cured, sound and reasonably free from weeds.

No. 4 PRAIRIE HAY—Shall include all hay not good enough for other grades, and not caked.

No. 5 GRADE PRAIRIE HAY—Shall include all hay not good enough for other grades.

STRAW.

No. 1 STRAIGHT RYE STRAW—Shall be in large bales, clean, bright long rye straw, pressed in bundles, sound and well baled.

No. 2 STRAIGHT RYE STRAW—Shall be in large bales, long rye straw pressed in bundles, sound and well baled, not good enough for No. 1.

TANGLED RYE STRAW—Shall be reasonably clean rye straw, good color, sound and well baled.

WHEAT STRAW—Shall be reasonably clean wheat straw, sound and well baled.

OAT STRAW—Shall be reasonably clean oat straw, sound and well baled.



If the elevators interested continue treating Superior in the future as they have in the past, the handsome young dame may feel like brushing them all off the earth.—*Superior Leader.*

ITEMS FROM ABROAD

Spain has raised the import duties on wheat to 50 cents per hectoliter (about 2½ bushels).

Ontario raised in 1894 20,500,000 bushels of wheat, 11,300,000 of barley, and 72,000,000 of oats.

Last year Russia's crops yielded, in bushels: Rye, 821,535,000; wheat, 282,642,000; oats, 687,876,300; barley, 186,718,218.

Great Britain's last year's crops were as follows: Wheat, 61,037,900 bushels; barley, 74,553,800, and oats, 139,732,700 bushels.

Roumania estimates its crops last year, in bushels, as follows: Wheat, 43,584,000; rye, 5,769,000; barley, 16,906,000; oats, 10,019,000.

Manitoba crops in 1894 amounted to 17,700,000 Winchester bushels of wheat, 12,200,000 of oats, 1,900,000 of potatoes and other root crops.

In France the crops of last year are estimated as follows: Wheat, 343,350,000 bushels; rye, 76,560,000; barley, 56,550,000; oats, 278,938,000.

Germany produced in 1894 126,400,000 bushels wheat, 33,336,000 winter spelt, 326,633,000 rye, 130,000,000 spring barley, 452,000,000 oats.

Italy's crops for 1894 are estimated, in bushels, as follows: Wheat, 123,000,000; oats, 16,000,000; barley, 8,000,000; maize, 54,763,000; rice, 15,000,000.

The first consignments of Argentine wheat of the new crop have reached Liverpool. The grain is said to be of inferior quality, but good enough for milling.

So many wheat fires are occurring in Argentine, all arising from sparks from locomotive engines, that an investigation is being made to discover the real why and wherefore.

Scotland's potato crop of next season is expected to be smaller than usual, and consequently a smaller exportation. As against this, however, the new United States tariff has reduced the duty from 25 to 15 cents per bushel, and increased importation may be looked for.

The United States consul at St. Petersburg writes that the western section of the Siberian Railroad, which is now practically completed, will haul at least 15,000,000 bushels of wheat for the eastern Siberian and European market, which is, of course, another menace to the American wheat producer.

It is suggested by a commercial agent at Castellamari that United States grain growers might secure in Italy a market for nearly 4,000,000 bushels of wheat per annum, which is the amount of foreign wheat used in making macaroni. The Italian government already allows a full drawback of the duty on foreign wheat milled and exported from Italy.

It is reported that the clover seed crop in England is so deficient that at least 200,000 bushels will be required from the United States. Clover seed in the United States is already demanding a pretty good price, especially in comparison with the grain market generally, and if a large amount is demanded for export it may be dearer than it has been in a number of years.

The building of grain elevators in Russia is stimulating a demand for the same kind of warehouses in Germany. According to a Berlin commercial report there are throughout the German Empire 45 merchant mills and eight distilleries which are furnished with silo warehouses. Public granaries are to be found at Mannheim, Cologne, Uerdingen, Ludwigshafen and Worms.

The total shipments of wheat from India from April 1 to February 9 were 11,740,000 bushels, of which 8,968,000 bushels were to the United Kingdom and 2,772,000 bushels to the Continent. The total shipments for the corresponding time last year were 20,748,000 bushels, of which 13,016,000 bushels were to the United Kingdom and 7,732,000 bushels to the Continent.

The total acreage of winter rye in 65 provinces of Russia in 1894 was, according to official statistics, 68,630,000 acres, against 67,558,000 in 1893, the yield being 85,073,000 quarters of 480 pounds each, against 70,771,000 quarters in 1893. The winter wheat acreage was 12,958,000, against 11,805,000 acres in 1893, the yield being 17,272,000 quarters of 480 pounds each, against 15,135,000 quarters in 1893.

In 1892 the United States shipped to Germany 6,302,130 tons of wheat. The next year this dropped to 3,149,282 tons, and in 1894 the imports were but 3,054,669 tons. Meanwhile Argentina exported to Germany in 1892 but 661,697 tons, in 1893 1,513,961 tons, and in 1894 3,196,190 tons. In 1893 Russia and Germany engaged in a tariff war. In consequence the imports of Russian wheat into Germany, which were 2,572,991 tons in 1892, dropped suddenly in 1893 to 216,362 tons. But as showing the promptness with which they re-

covered their no small proportions when the temporary restriction was removed, a consular report shows that in 1894, peace having been restored, the Russian wheat imports into Germany reached 2,354,459 tons.

Sweden's import duties on grain, which were recently increased, in some instances more than 100 per cent., are now as follows, per 100 kilos (220 pounds): Rye, wheat, barley, maize, peas, beans, and other kinds not specially provided for, old rate 1.25 kroners, new rate 3.15 kroners (84 cents); malt, old rate 2.50 kroners, new rate 4 kroners (\$1.25); flour and groats, old rate 2.50 kroners, new rate 6.50 kroners (\$1.75).

The prospects for next season's harvests are looked forward to with more than usual interest, and bulls find some comfort in the reports. In the South of England the winter wheat area has been reduced by floods. In France everything is favorable for the crops. In Northern Italy and Belgium on account of excessive rains seeding has been reduced, as also in Roumania, while conditions have been more favorable in Germany and Spain.

Wheat seldom creates so much disturbance as it is doing at present. Dissatisfaction seems to be widespread. Germany is petitioning parliament for a remedy for low prices; the many English agricultural societies are passing resolutions against "the injury done legitimate trade by speculative bargaining," and the "dangerous and rotten system" of "gambling in wheat." Russia is taking all kinds of measures. Truly "there's something rotten in Denmark."

The new grain tax on Argentine grain, or rather the mode of collecting it, is causing many protests. No grain can be transported to mills, elevators or railroads without a certificate showing the tax to be paid on the exact amount shipped. Towns are far apart in Argentine, and transportation facilities are limited. The farmer has to go to the capital town of his department to pay his tax, first ascertaining, which he cannot, how much of his grain the railroad will be able to take. It is not expected that the law will be long in force.

Argentine's wheat crop is expected to be smaller than last season's and poorer in quality. It is estimated at 80,000,000 to 100,000,000 bushels. In view of this fact, and on account of increased consumption, exportation will probably be below last year's. Maize has done better with an increased acreage and yield. Maize has been a short crop for several years in Argentine, but the exportations will show a material increase over last season. Linseed also is large in yield and good in quality, and the exportations may be expected to be double those of last year.

As the charges for receiving grain at Liverpool have for some time been considered excessive, those interested in the grain trade have been moving for a reduction, and the result is that charges for "master portorage" have been reduced as follows: Receiving and trimming on quay from elevator without weighing—wheat, beans, peas, Indian corn, rye, millet, lentils and barley—reduced from 4d. to 3d.; on oats, reduced from 5d. to 4d.; receiving, carrying to pile, skipping into bulk, and trimming on the quay—wheat, etc.—reduced from 6½d. to 5½d.; on oats, from 8d. to 7½d.; receiving, examining for external damage, selecting to mark and storing on quay from steamers having mixed cargoes wheat, etc., reduced from 5½d. to 5d.; on oats, from 7½d. to 7d.

A recent report from St. Petersburg states that with a view to remedying the present stagnation in the grain market the Russian government has sanctioned a plan to purchase rye and wheat on behalf of the state, direct from the growers, from time to time, according to the state of the market. The grain thus purchased will be used for feeding the army and the populace is entitled to purchase it. Sales to private persons, however, are to be limited as to quantity and the grain will only be disposed of at bullish rates. Russian markets will have to be very different from those of America or the United Kingdom to be really benefited by such a plan. We find the old law of supply and demand a persistent regulator.

The United States consul to Cuba has issued a report showing the difference between the present duties imposed on American grain and the duties under the reciprocity treaty that formerly existed. Under the reciprocity treaty the duty imposed upon American wheat was 30 cents per hundred kilos, compared with \$3.95 at present; on flour \$1 then and \$4.75 now; on corn the increase is from 25 cents to \$3.95; on meal from 25 cents to \$4.75. The importation of American flour decreased after the treaty was repealed from 105,043 bags for the months of September, October, November and December, 1893, to 12,995 bags for the corresponding months in 1894. The rates imposed on American products are the highest imposed on products from any country. Since this report was made, however, Spain has lowered rates on American products.

Washington hay shippers are making strenuous objections to the Northern Pacific's minimum carload of hay being 24,000 pounds. As much as 30,000 pounds of hay have been loaded into one car, but no ordinary car will hold 24,000 pounds. The rule will doubtless be changed, as it will be to the railroad's own interest to do so.

Latest Decisions.

Storage Cannot Be Collected After Burning of Goods.

Where a contract for storage provides that the goods shall be stored for a certain length of time for a certain sum, and they are burned before the term of storage has expired, the Supreme Court of California holds (*Cunningham vs. Kenney*, 38 p. 645), that no recovery for storage can be had, even though the loss has been occasioned without the warehouseman's negligence. It would, however, be otherwise if the contract provided for payment in such case as well as for exemption from liability for the loss.

Warehouse—Accident—Negligence.

The Appellate Court of Indiana held, in the recent case of *The South Bend Iron Works vs. Larger*, that the owner or occupant of a warehouse used for storage has a right to maintain an elevator to hoist goods and for the use of the employes, and that before one injured by falling through the shaft of such elevator, which was left unprotected through the owner's negligence, may recover damages, it must appear that such owner was under some legal duty or obligation to the person injured to protect him against the dangers of such an opening.

Commissions Are Payable though Purchases Are Not Paid For.

Commissions for making sales are earned, in the absence of any contract to the contrary, when the sales are made. That the purchasers thereafter refuse to complete their agreements does not alter this. Moreover, the New York Court of Common Pleas holds (*Strong vs. Prentice*, 31 N. Y. Supp. 144), that an agreement to pay commissions, based in amount upon an excess over a stipulated purchase price to be procured by the agent, is undoubtedly within this rule which imposes upon the principal a liability for such payment when the sale is made, regardless of the fact that the purchaser has made no payments and refuses to make any.

Duty of Railway Companies to Load Freight.

Without deciding whether railway companies can, as to such bulky freight as hay, lumber, sawlogs and live animals, make a regulation that the shipper shall load same, because that question was not properly before it in this case, the Court of Appeals of New York holds (*London & L. F. Ins. Co. vs. Rome, W. & O. R. Co.*, 39 N. E. 79), that there is no doubt that it is the duty, generally, of a railway company to load into its cars the freight delivered to it for transportation, and that it cannot generally devolve that duty by any regulation upon the shipper; and that it cannot legally, as a condition of transportation generally, exact from shippers a contract to place the freight into its cars.

Copies of Bills of Lading.

It is well settled that the declarations of an agent as to a past transaction are not evidence against his principal. For this reason the Supreme Court of North Carolina holds (*Edgerton vs. Will. & W. R. Co.*), in an action brought to recover from a railway company damages for failure to deliver certain freight, that "duplicate" bills of lading, copied from the stub books from which the original bills were issued, and made by the railway company's local agent some time after the originals were issued, the data for making them being obtained from the "stubs" of the originals, are not admissible in evidence. They are nothing more in effect, the court says, than declarations of that agent that the "stubs" in the books of the railway company show that on certain days it received certain freight for shipment.—*Business Law*.

Sales—Inspectors' Certificates.

Justice Case has rendered a decision in the case of *William Wisner and others of Memphis against the Moore Grain and Elevator Company* of this city for about \$90 loss on some shipped hay. It was the claim of the plaintiffs that when the hay shipped to them by the Moore Grain and Elevator Company reached Memphis it was sent on to Birmingham, where it was sold at a loss of about \$90. The plaintiffs claimed that it would not have sold at a loss if the hay had been of the quality they expected it to be. Justice Case held that in the absence of any other arrangements, the certificates of the local inspectors are to stand in case of disagreement, and the local inspectors had found the carloads of hay to be all right. The loss on the sale of the hay might have been due to the market and not to the quality of the hay, the justice suggested. He decided in favor of the defendant.—*Kansas City Journal*.

The anti-option movement does not seem to be receiving unanimous support. Representative Hatch was defeated last November, and now Senator Washburn has been defeated in the Minnesota Legislature.

VALUABLE BOOKS FOR GRAIN DEALERS.

The following standard works will be sent, postage paid, on receipt of prices given:

ROBINSON'S TELEGRAPH CIPHER.—The publishers have recently revised this excellent work, and we are now prepared to supply the trade. Cloth binding, \$1.50; leather, \$2.00.

WEIGH BOOKS.—Containing 125 perforated leaves with four weigh tickets and four stubs to each leaf, well printed upon good paper. The books are well bound. Copies will be mailed to any address for \$1.00.

CLARK'S VEST-POCKET GRAIN TABLES.—A very useful and handy little book for grain buyers: to be used in reducing to bushels any quantity of grain or seeds up to 100,000 pounds. Size $2\frac{1}{2}$ by $5\frac{1}{2}$ inches, 16 pages. Leatherette, \$1.75.

POUNDS TO BUSHELS.—These tables which show the number of bushels in any quantity from 20,000 to 70,000 pounds were compiled for the Chicago Grain Inspection Department. They are well printed on good paper and conveniently arranged for quickly finding the number of bushels in a carload. Each book contains ten leaves and each leaf is indexed at margin and printed on one side only. Each book is neatly bound in cloth. They will save clerks much labor and prevent errors in reduction. Price for "OATS," \$1.00; "BARLEY," \$1.00; "CORN AND RYE," \$1.00. The set, \$2.50.

JENNINGS' TELEGRAPH CIPHER AND DIRECTORY TO NEW ENGLAND TRADE.—A new guide to carload buyers of grain throughout New England. A list of those engaged in the grain, feed and flour trade. Western grain shippers and millers wishing to do business in this territory will find this directory invaluable. The telegraph cipher has met with favor and is highly recommended by users. In fact the code part of the book is considered by many shippers superior to any other in use. It is modern and practical, a great money saver and will prevent mistakes. Nicely bound in leather, \$3.00.

ADAMS' CABLE CODEX.—This code is compiled especially for sending cablegrams and is used extensively in this country and abroad. The seventh edition, which is about to go to press, will contain 160 pages of cipher words, conveniently arranged. The code contains sentences covering and referring to buying and selling, condition of market, sterling money, United States money, business, financial matters, letters of credit, drafts, standing of firms and many sentences used by travelers. The cost of the code is a mere nothing compared with the saving which can be made on one message. Price, postpaid, \$0.55.

DAVIS' GRAIN TABLES.—These tables give the value of any number of bushels of produce weighing 60 pounds to the bushel from 25 cents to \$1.25 per bushel, and the value of any produce weighing 32, 48 and 56 pounds to the bushel at 15 cents to \$1.50. The book also contains Davis' Dockage Table, which gives the amount to dock any load of wheat up to 600 bushels at $1\frac{1}{2}$ to 5 pounds' dockage. The book contains 219 pages of tables, printed on good paper, with large type, and well bound in cloth. The book is a new publication, and the arrangement of the tables is much more convenient than in some of the old publications. Price, \$1.25.

CLARK'S GRAIN TABLES.—This work is published in several different forms, for use in different lines of business. In these tables pounds are reduced to bushels, so that a buyer can quickly determine the correct number of bushels in a load without doing any figuring. Their use effects a saving every day of more than time enough to pay for them. The edition intended principally for reducing team scale weights to bushels contains nine tables, and is bound in paper. Price 50 cents. This will be found invaluable to country buyers. A new edition, intended for shippers and commission merchants, reduces any quantity up to 64,000 pounds to bushels. It contains 16 tables, and is neatly bound in cloth. Price, \$1.50.

ROPP'S COMMERCIAL CALCULATOR.—A small manual in compact form which contains a new system of useful and convenient commercial tables. Also a "Practical Arithmetic for Practical Purposes" in which is embodied the shortest and simplest rules and methods known. It includes in its contents a table giving the value of cattle, hogs, flour, etc., for any amount ranging from 3 to 20,000 pounds, and in price from \$2.50 to \$6.75 per 100 pounds. It contains a table which shows the equivalent of English market quotations from 1 to 100 shillings in U. S. money. It also shows the freight on grain per bushel from 1 to 50 cents per 100 pounds. The grain tables show the number of bushels and odd pounds in any quantity of any kind of grain from 10 pounds to 100,000 pounds. The hay, straw and coal tables show the value in tons of any amount ranging from 10 to 3,000 pounds at prices from 25 cents to \$18 per ton. The interest tables are very complete and give the interest for any amount for any time and for any rate per cent, ranging from 6 per cent, to 10. The millers' and farmers' exchange table gives the number of pounds of flour to be received from wheat ranging from 5 to 3,000 pounds and from

25 to 40 pounds to the bushel. Tables of money weights and measures are also included, and also the metric system. The book contains much other useful information. Price, \$0.50.

For any of the above, address
MITCHELL BROS. Co., 184 and 186 Dearborn street, Chicago, Ill.



Issued on January 15, 1895.

GAS ENGINE.—Feodor Hirsch, Steinway, N. Y. No. 532,555. Serial No. 505,400. Filed March 28, 1894.

GRAIN BIN.—Samuel E. Kurtz, Greenfield, Iowa, assignor of one-half to Henry Kurtz, Foosland, Ill. No. 532,736. Serial No. 513,043. Filed May 31, 1894.

MALT STIRRER.—John F. Dornfeld, Chicago, Ill. No. 532,542. Serial No. 495,212. Filed Dec. 30, 1893.

MALT STIRRER.—John F. Dornfeld, Chicago, Ill. No. 532,543. Serial No. 506,848. Filed April 4, 1894.

MALT HOUSE.—John F. Dornfeld, Chicago, Ill. No. 532,544. Serial No. 510,454. Filed May 8, 1894.

MALTING FLOOR.—John F. Dornfeld, Chicago, Ill. No. 532,545. Serial No. 522,061. Filed Sept. 4, 1894.

MALTING DRUM.—Otto Hentschel, Grimma, Germany. No. 532,553. Serial No. 511,459. Filed May 16, 1894.

Issued on January 22, 1895.

METALLIC GRAIN STORAGE BUILDING.—Edward O. Fallis, Toledo, Ohio. No. 532,774. Serial No. 519,123. Filed July 31, 1894.

VAPOR ENGINE.—Allen W. Brown, St. Louis, Mo. No. 532,865. Serial No. 494,457. Filed Dec. 22, 1893.

GAS ENGINE.—Frank E. Covey and George W. Haines, Stockton, Cal. No. 532,869. Serial No. 506,138. Filed April 3, 1894.

GRAIN MEASURING REGISTER.—John A. McFayden, Erie, Pa. No. 532,897. Serial No. 517,673. Filed July 16, 1894.

BEAN SEPARATING MACHINE.—DeWitt C. Breed, Medina, N. Y. No. 532,914. Serial No. 514,611. Filed April 13, 1892. Renewed June 14, 1894.

GAS ENGINE.—Franklin P. Miller, Bloomfield, N. J. No. 532,980. Serial No. 499,948. Filed Feb. 12, 1894.

Issued on January 29, 1895.

BALING MACHINE.—Benj. F. Hutches Jr., Galveston, Texas. No. 533,065. Serial No. 500,100. Filed Feb. 13, 1894.

AUTOMATIC EAR CORN FEEDER AND CONVEYOR.—Jeremiah S. Burke, Pemberton, Ohio. No. 533,160. Serial No. 509,181. Filed April 27, 1894.

GRAIN METER.—Ben F. Warner, Homer, Mich. No. 533,255. Serial No. 514,384. Filed June 13, 1894.

APPARATUS FOR MALTING GRAIN.—Hurbert C. Baker, Hartford, Conn., and John W. Free, New York City. No. 533,339. Serial No. 408,742. Original application filed Oct. 15, 1891. Divided and this application filed Jan. 31, 1893. Serial No. 460,389.

BALING PRESS.—Charles H. Field, Dalton, Ga. No. 533,353. Serial No. 492,411. Filed Dec. 1, 1893.

Issued on February 5, 1895.

SPIRAL CONVEYOR.—Allan G. Mather, Milwaukee, Wis. No. 533,479. Serial No. 518,934. Filed July 30, 1894.

FEEDER FOR GRAIN SEPARATORS.—John B. Cornwall, Moline, Ill., assignor to the Barnard & Leas Mfg. Co., same place. No. 533,529. Serial No. 521,560. Filed Aug. 28, 1894.

CORN SHELLER.—Thomas H. Tabor, Ellijay, Ga. No. 533,620. Serial No. 527,272. Filed Oct. 29, 1894.

GAS ENGINE.—Elliott J. Stoddard, Detroit, Mich., assignor to the H. C. Hart Manufacturing Company, same place. No. 533,754. Serial No. 513,068. Filed May 31, 1894.

HORSE POWER.—Edward J. Wood, Beckwith, Cal. No. 533,768. Serial No. 500,354. Filed Feb. 16, 1894.

PULSATING WATER SEPARATOR FOR REMOVING ROCK, GRIT OR FOREIGN MATTER FROM GRAIN.—James H. Montgomery, Denver, Colo. No. 533,821. Serial No. 510,066. Filed May 4, 1894.

TRADEMARKS.

FLAXSEED OIL MEAL.—Henry D. McCord, New York, N. Y. Filed Jan. 8, 1895. The word "EAGLE." Used since July 1, 1892.

THE MARKETS.

We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.

GRAIN REPORT OF PH. BENZ & Co., Chicago, February 12.—The bulk of the barley is nearly all gone. Here and there is a small lot held by farmers for higher prices, but the elevators in general are cleaned out. There is plenty of timothy and flax in farmers' hands which they are not marketing at present on account of inclement weather and demand being slack. There is plenty of oats in the country, but it is held for higher prices. Wheat is uncertain. On account of severe storms business is to a large extent at a standstill, but the outlook for spring trade is favorable.

GRAIN REPORT OF J. F. ZAHM & Co., Detroit, Mich., February 12.—The closing prices on wheat to-day are: No. 2 Red 54 cents; No. 1 White 55 cents, for May delivery 54½ cents. CORN.—The market is steady. No. 2 Mixed sells at 41½ cents; No. 3 Mixed 41½ cents; No. 4 Mixed 40 cents; No. 2 Yellow 43½ cents; No. 3 Yellow 43½ cents; No. 4 Yellow 41½ cents. OATS.—Steady. No. 2 White sells at 34 cents; No. 2 Mixed 32 cents, and light mixed 33½ cents for May delivery; No. 2 White is offered at 36 cents. RYE is steady at 55 cents for No. 2. BARLEY is in good demand. CLOVER SEED is firm at \$5.25.

GRAIN REPORT OF SHANKS, PHILLIPS & Co., Memphis, Tenn., February 9.—The markets have been uniformly steady. WHEAT is firm at 55 cents for No. 2 Soft Winter. CORN is in good demand. No. 2 White sells at 42½ cents; No. 3 White at 41½ cents; No. 2 Mixed at 41½ cents per bushel. OATS are ruling steady with a quiet market. No. 2 White sells at 33½ cents; No. 3 White at 32½ cents; No. 2 Mixed at 32½ cents per bushel. HAY is firm with light receipts. No. 1 Timothy sells at \$10.75@11.00; Choice \$12.25@12.50; Fancy \$13.00; Choice Clover sells at \$11.50@11.75 for mixed; No. 1 at \$10.50; No. 2 at \$8.25; Choice Kansas Prairie at \$8.25; No. 1 at \$7.50@7.75; Choice Arkansas Prairie sells at \$6.00@6.50.

GRAIN REPORT OF COLLINS & Co., Cincinnati, February 9.—The extreme cold weather has generally retarded the movement of grain, and the receipts during the past week were unexceptionally small. The few offerings have met with a sharper demand which caused values to quickly advance. Moderating weather will permit of an increased movement, while the advance in prices will prove more of an attraction to a larger number of holders of grain. Increased arrivals would create an easier feeling, and cause some reaction in values, and we would advise quick shipments, believing that the first arrivals will do the best. WHEAT.—Receipts are small and the demand more active, with prices ruling higher. No. 2 Red at 54½ cents; No. 3 at 53½ cents. CORN.—The movement continues small, and a good active inquiry exists for the limited offerings of all kinds at an advance in prices. No. 2 White at 44½ cents; No. 3 White at 43½ cents; No. 2 Mixed at 44 cents; No. 3 Mixed at 43 cents, closing firm. EAR CORN.—Cold weather causing increased consumption, and with small arrivals higher values are ruling. Choice Yellow Ear at 44½ cents; Mixed Ear at 43½ cents; White Ear at 42½ cents. The advance in prices will cause a larger movement. OATS.—A little more activity is developing in the demand, but the offerings are still ample for the requirements of the trade, with prices steady and essentially unchanged. No. 2 White at 33½ cents; No. 3 White at 32½ cents; No. 2 Mixed at 31½ cents; No. 3 at 31 cents. RYE.—Is ruling firm for the very few offerings at 55½ cents for No. 2. HAY.—Receipts for the week 2,535 tons, shipments 1,710 tons; for the corresponding week last year the receipts were 1,495 tons, and shipments 580 tons. The receipts of hay continue to be enough for all the requirements of the trade, with indications of the movement increasing in volume. Prices have been fairly well sustained, although the undertone of the market is inclined to be weak, and unless the extreme cold weather that has lately prevailed causes an increased demand, we anticipate that the outside price for No. 1 will go to \$10 per ton. We quote choice in small bales at \$10.50@10.75; No. 1 at \$10.00@10.25; No. 2 at \$9.00@9.50; No. 1 Clover Mixed at \$9.25@9.50; No. 2 Clover Mixed at \$8.75@9.00; No. 1 (bright green small stem) Clover at \$9.25@9.75; No. 2 Clover at \$8.50@9.00; No. 3 Timothy (grass mixed) at \$8.00@9.00. STRAW.—Bright clean wheat at \$4.25@4.75 and in fair demand. MILL FEED.—Scarce and firm. Bran at \$13.75@14.25 per ton; Middlings at \$14.50@15.00.

HAY IMPORTS EXCEED EXPORTS.

According to the last report of the Bureau of Statistics, hay amounting to 19,927 tons, valued at \$142,346, was imported during December, against 5,526 tons, valued at \$47,900, imported during December, 1893; and during the twelve months ending with December 143,205 tons, valued at \$1,141,350, were imported, against 97,219 tons, valued at \$891,297, imported during the corresponding months of 1893.

Of imported hay we exported none in December, and none in December, 1893; and during the twelve months ending with December 64 tons were exported, against 204 tons, valued at \$1,782, exported during the corresponding months of 1893.

We exported 3,931 tons of domestic hay, valued at \$58,323, in December, against 4,328 tons, valued at \$69,596, in December, 1893; and during the twelve months ending with December 55,596 tons, valued at \$875,730, were exported, against 40,217 tons, valued at \$642,024, exported during the corresponding months of the year preceding.

Great efforts are being made for the relief of the impoverished farmers of the West. The gallant South has given generously; a train of 20 cars left New Orleans the other day. Efforts are being made to supply seed wheat to North Dakota; Congress is asked to appropriate \$300,000 for seed wheat for Nebraska, and an appropriation of \$100,000 has already been made for that purpose for Kansas.

LOCATIONS FOR FACTORIES.

The name of the Chicago, Milwaukee & St. Paul Railway has long been identified with practical measures for the general upbuilding of its territory and the promotion of its commerce, hence manufacturers have an assurance that they will find themselves at home on the company's lines.

The Chicago, Milwaukee & St. Paul Railway Company owns and operates 6,150 miles (9,900 kilometers) of railway, exclusive of second track, connecting track or sidings. The eight states traversed by the lines of the company, Illinois, Wisconsin, Northern Michigan, Iowa, Missouri, Minnesota, South Dakota and North Dakota, possess, in addition to the advantages of raw material and proximity to markets, that which is the prime factor in the industrial success of a territory—a people who form one live and thriving community of business men, in whose midst it is safe and profitable to settle. Many towns on the line are prepared to treat very favorably with manufacturers who would locate in their vicinity.

Mines of coal, iron, copper, lead and zinc, forests of soft and hard wood, quarries, clays of all kinds, tan-bark, flax and other raw materials exist in its territory in addition to the vast agricultural resources.

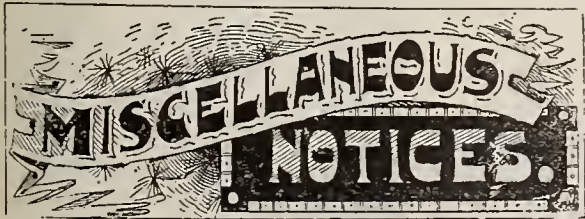
A number of new factories have been induced to locate—largely through the instrumentality of this company—at towns on its lines. The central position of the states traversed by the Chicago, Milwaukee & St. Paul Railway makes it possible to command all the markets of the United States. The trend of manufacturing is westward. Nothing should be permitted to delay enterprising manufacturers from investigating. Confidential inquiries are treated as such. The information furnished a particular industry is reliable. Address

LUIS JACKSON,
Industrial Commissioner, C., M. & St. P. R'y.
425 Old Colony Building, Chicago, Ill.

A reflective Chicago shipper said recently: "I have been trying to think at what price anybody or any syndicate could guarantee to move the 30,000,000 bushels of wheat now here at Chicago. There is not a fact to guide one. Wheat has gone to 49 cents with practically no sales either for immediate or spring shipment. Is there anything to suggest now that 45 cents would move much of it?"

A Piano at a Nominal Price.

Chicago's largest music house, Lyon & Healy moved into a magnificent new building some little time ago. They have a number of slightly used and second-hand pianos returned from World's Fair renting, etc., etc., which they have determined to sacrifice rather than to continue to make room for. These instruments comprise Square pianos at \$40, \$65, \$90, \$100, and \$125. Upright pianos at \$125, \$140, \$150, \$165, \$190, \$200, \$225, \$240, and upward. Grand pianos at \$200, \$250, \$300 and upward. Nearly all originally sold for from two to four times their present price. Almost all prominent makes are represented, including among numerous others: Chickering, Knabe, Steinway, Weber, Decker, Steck, Fischer, etc. This is an opportunity that will not occur again, as Lyon & Healy have not moved for twenty years. Immediate attention is therefore necessary. A good plan would be to order a piano, leaving the selection to Lyon & Healy. However, they will send a list and full particulars upon application. Any piano not proving satisfactory may be returned at their expense. Address at their new salesrooms, corner Wabash Avenue and Adams St., Chicago. Distance is no obstacle in taking advantage of this remarkable chance to obtain a piano, for in proportion to the saving to be made the freight charges are insignificant. If you do not already know them by reputation any banker will assure you of Lyon & Healy's entire responsibility and record of over a third of a century for honorable dealing. Write today so as to avoid disappointment.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

COUNTRY BANK STOCK WANTED.

I have frequent calls for good country bank stocks, and solicit letters of inquiry from parties having such stocks for sale. Address

J. H. HUNT, dealer in stocks and bonds, member of Chicago Stock Exchange, 69 Board of Trade Building, Chicago, Ill.

POSITION WANTED.

Wanted—Position by a young man who has had experience in buying hay and grain. Address

F. A. WHITE, Fairfield, Iowa.

ELEVATOR WITH CRIBS WANTED.

I want to rent or lease a steam or horse power grain elevator with cribs in a good corn and oat section in Central Illinois. Prefer location on either Illinois Central, Chicago & Alton or Burlington Railroad. Address, giving full particulars,

N. D., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

RUDY'S PILE SUPPOSITORY

Is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and free sample to MARTIN RUDY, Registered Pharmacist, Lancaster, Pa. No POSTALS ANSWERED. For sale by all first-class druggists everywhere. Peter Van Schaack & Sons, Robert Stevenson & Co., Morrison, Plummer & Co., and Lord, Owen & Co., wholesale agents, Chicago, Ill.

DAVIS' GRAIN TABLES.

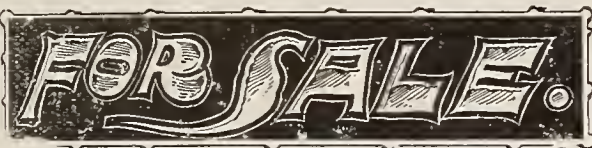
The value of wheat or any grain at 60 pounds to the bushel, for any amount less than 100 bushels is shown without addition or multiplication, and for any amount over 100 and under 1,000 bushels, with but a single addition; at any price from 25 cents to \$1.25 per bushel. The value of bushels and pounds of other grain also is shown at 56, 48 and 32 pounds to the bushel at any price from 15 cents to \$1.50 per bushel. Price, postpaid, \$1.25. Address

E. D. DAVIS, 610 Nicollet Ave., Minneapolis, Minn.

WANTS POSITION AS HEAD MILLER.

Wanted—A thoroughly competent miller desires to obtain on or about May or June 1 the management and head millership of a flour mill of 50 to 200 barrels' capacity. Am up to date on everything pertaining to modern milling, grain, etc. Am at present connected with one of the largest milling firms in the country, but desire a change in location. A new mill preferred. References furnished, and nothing but a first-class position desired. Prefer Missouri, Eastern Kansas, Oklahoma Territory or Indian Territory. Address

A No. 1, ILLINOIS, care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

NEW ELEVATOR CHEAP.

For Sale—A 90,000-bushel elevator, new. Situated in the corn belt of Illinois. Gas engine power, new Fairbanks Scales, and hopper scales in house. Low dump. All equipped with modern conveniences. Will sell for part cash, balance long time with good security. This can be bought cheap by right party. Address

E. S., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

JENNINGS' CIPHER CODE.

Jennings' N. E. Telegraph Cipher contains many novel ideas, and is complete with instructions as to buying, selling, ordering, market advices, offers, bids, finance, bill lading, instructions, freight inquiries and advices, shipping inquiries and instructions, guaranteeing, etc., such as no other cipher contains. It is now in use with the principal shippers and dealers in flour, grain and feed. It is invaluable to shippers of corn and oats. For general shipping business it is superior to any other telegraph code. Send for list of users, which is the best argument in its favor. It is also a directory of the New England grain dealers. Sent postpaid on receipt of price, \$3. Address

HENRY JENNINGS, 613 Chamber of Commerce, Boston, Mass.

A RARE OPPORTUNITY.

A large warehouse, grain elevator and coal yard at Ithaca, N. Y., for sale to close an estate. The block is bounded on the south by West State street, the leading business street; on the west by Cayuga Inlet, where two canal boats can take or discharge cargoes at once; on the north by West Seneca street, and on the east by the D., L. & W. R. R., from which a switch extends the whole length of the block, making unsurpassed facilities for shipping and receiving any kind of freight by rail or boat. The warehouse has large storage room and the grain elevator 40,000 bushels' capacity, together with platform, grain and hay scales, with engine, boiler and machinery complete. On this ground for more than 60 years have leading men of Ithaca done business, not one of whom has been unsuccessful. The good will of this widely known grain, coal and warehouse stand is alone worth the price asked for the entire property. Address

Mrs. C. S. WATTLES, executrix of C. S. Wattles' estate, by W. R. Gunderman, Ithaca, N. Y.

FOR SALE.

THREE GRAIN ELEVATORS

In Western Iowa on C. & N. W. R. R.

MARTIN D. STEVERS & CO.

COMMISSION MERCHANTS,

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ORDER YOUR COAL FROM



CHICAGO OFFICE, 355 Dearborn Street.

TO POULTRY RAISERS.

The Complete Poultry Manual is a neat little work which is well worth reading by those interested in poultry, or by boys or girls who want to turn an honest penny. The price is only 25 cents. Sent postpaid on receipt of price. Address

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Grain, Seed and Provision

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Established 1875.

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Refer to Union and Planters' Bank.

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GRAIN RECEIVERS.

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GRAIN, Flour, Seed, Hay and Straw.

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Manufacturers National Bank.
Merchants National Bank.**Muhle & Herz,****HAMBURG, GERMANY.**

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Corn, Grain, Flour,**Provisions, Mill Feed.**

Correspondence Solicited from Exporters and Shippers.

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FROM

SUFFERN, HUNT & CO.,

ROOMS 10 AND 11 FENTON BLOCK,

DECATUR, - ILLINOIS.We make a specialty of White and Yellow Corn for milling purposes. We also handle mixed Corn, white and mixed Oats, Mill Feed and Hay. Can ship any line. **We want your business** Send for prices.**COMMISSION CARDS.**

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SEEDS, BEANS, PEAS AND CORN GOODS.

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GEO. N. REINHARDT & CO.,

Melrose Station, New York City.



We sell on Commission and buy direct,

HAY, GRAIN AND FEED.Storage capacity, 8,000 bales, 30,000 bushels.
Let us know what you have to offer.**D. G. Stewart,****GRAIN AND COMMISSION.**

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Capacity, 300,000 Bushels.

LIBERAL ADVANCES ON ALL CONSIGNMENTS.
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COMMISSION MERCHANTS.****BARLEY A SPECIALTY.**Room 23 Chamber of Commerce Bldg.
Milwaukee, Wis.

Careful attention given to orders from Brewers, Maltsters and Millers.



Raised under our supervision, very choice. Write for testimonials from Canadian dealers, prices and samples.

E. R. ULRICH & SON.

Also Choice Milling White or Yellow Corn, White Oats, Red Winter Wheat. Elevators along Wabash Ry., J. S. E. Ry., C. & A. Ry., St. L., C. & St. P. Ry., Central Illinois.

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We use Robinson's or Jennings' Cipher.**COMMISSION CARDS.****E. P. MUELLER,**

Shipper of Wet Feed,

From Chicago, Milwaukee and La Crosse.

Shipments of grain and hay taken in exchange for feed at highest Chic go market prices. No charge for commission. Special inducements made on Wet Grain for silo purposes during May and June. Write for circulars and prices.

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Brewers' Wet and Dried Grains, Screenings, Barley Sprouts,
Hominy and Mill Feed.**Robert McKnight & Sons,****COMMISSION MERCHANTS,**

AND DEALERS IN

GRAIN, FEED AND HAY,

2106 and 2108 Market Street, - PHILADELPHIA

REFERENCES: { Merchants' and Third National Banks,
PHILADELPHIA.**PAINE BROTHERS,***Grain Merchants,***28 CHAMBER OF COMMERCE,****MILWAUKEE, WIS.**Lessees of C., M. & St. P. Elevator Co.  **BUY and SELL
OUTRIGHT.****OATS** We deal very largely in Oats and Barley, shipping by cargoes, and also handle considerable quantities of Wheat.**BARLEY** We have special facilities for drying damp grain, and are always ready to buy low-grade Wheat, Barley or Oats, as well as Barley**WHEAT** Screenings and Wheat Screenings.**BARLEY SCREENINGS****DAMP GRAIN** We are always ready to make cash bids, free of commission,**DAMAGED WHEAT** on samples, and will pay sight draft against**FIRE BURNT GRAIN** railroad receipt for 3/4 value, making final**WHEAT SCREENINGS** returns next day after shipment arrives.**MILL FEEDS** We buy west and north of Chicago, and sell east and south of Chicago.

Send us samples, quoting prices on anything you have to offer; or we will submit bids, if requested.

Milwaukee weights and inspection to govern all transactions when shipments touch this point.

We can handle goods over Northwestern Line, and most other roads, as readily as over the C., M. & St. P.

Unquestionable references furnished on request.

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The Incline Elevator and Dump.

Patented April 3, 1894.

It is **THE NEW WAY** of elevating ear corn, shelled grain or minerals into car or storage bin.

Its cost is so small that it is practical for farm use.

Its pulley blocks are roller bushed and steel, reducing friction to a minimum.

With it ear corn can be cribbed with less expense than with a scoop, if cost of storage is considered.

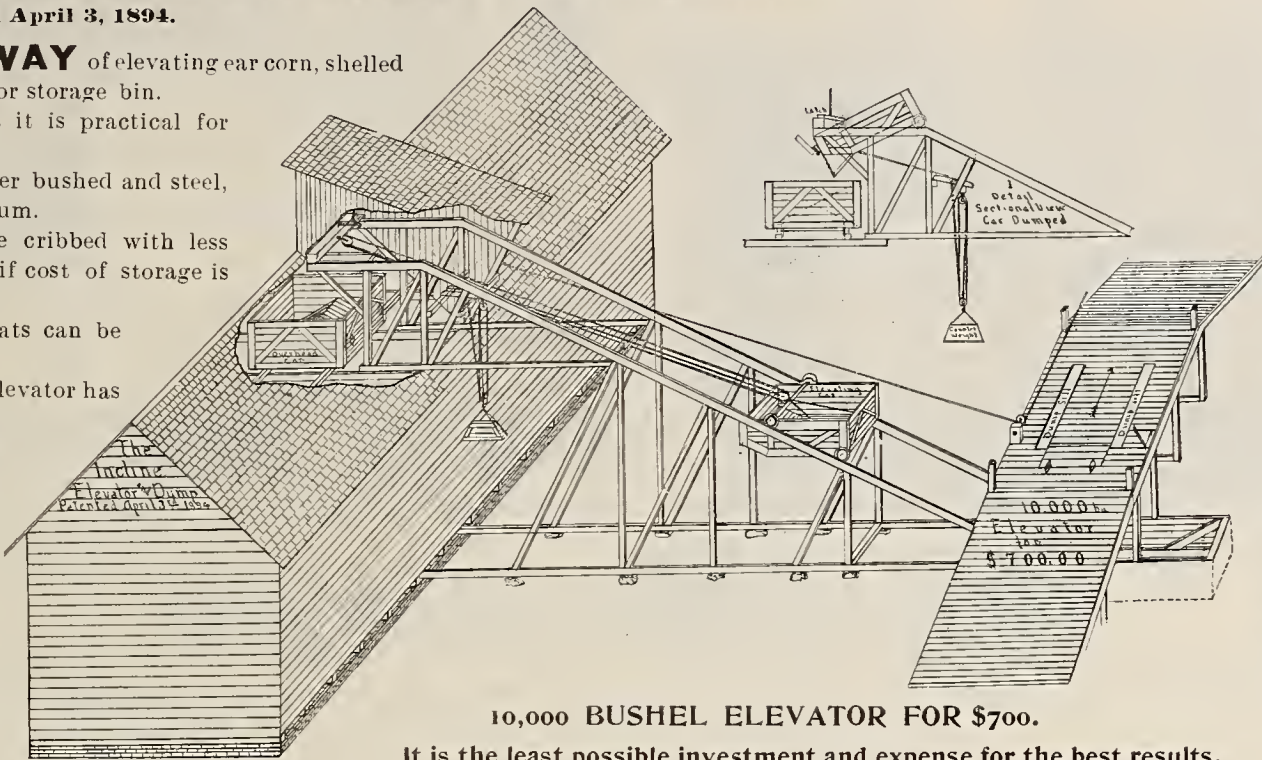
With it 3,000 bushels of oats can be elevated in one hour.

With it a grain dealer's elevator has the following advantages:

Every team elevates its own load, thereby the power for elevating is obtained without cost.

A whole load is elevated at a time and dumped at the top, making it practical to use an overhead car by which at the same cost you obtain more shipping bin capacity alone than all the storage and snipping bin capacity of a belt elevator.

Cleaning machinery can be adjusted with unusual convenience.



10,000 BUSHEL ELEVATOR FOR \$700.

It is the least possible investment and expense for the best results.

Manufactured by

H. KURTZ & SON, Mansfield, Ill.

Going to Buy a Scale?

If so, read a few opinions of Prominent Elevator People on the Merits of the Demuth Check Beam.

C. A. PILLSBURY, Prest. G. W. PORTER, Treas. and Mgr. K. R. GUTHRIE, Secy.
ATLANTIC ELEVATOR COMPANY, Incorporated.
GENERAL GRAIN DEALERS. Elevators on Minneapolis, St. Paul and Sault St. Marie Ry.
J. A. DEMUTH Esq., Oberlin, O. MINNEAPOLIS, MINN., May 25, 1893.
DEAR SIR:—Replying to yours of the 22d, would say that we have the Check Beams on twelve (12) scales in our Atlantic "A" elevator, and like them very much. We find them a valuable check on the weighman, and good for reference to check up with. Yours truly, K. R. GUTHRIE, Secy.

NEW YORK CENTRAL LIGHTERAGE CO. NEW YORK CENTRAL ELEVATORS.
Gibson L. Douglass, Mgr. WEST SHORE ELEVATOR. 1 and 3 Beaver Street.
A. DEMUTH, Esq., New York, May 26, 1893.
DEAR SIR:—We are using nineteen "Check Beams" on the Fairbanks scales at N. Y. C. & H. R. R. elevator, and sixteen at the West Shore R. R. elevator. Have discovered a number of errors through their use during the past two years, and consider them a good thing. Yours truly, G. W. PHELON, Supt.

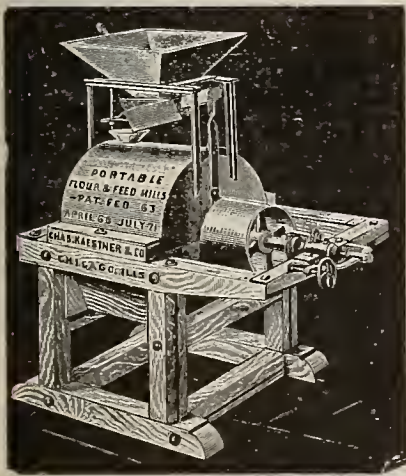
ARMOUR ELEVATOR CO., Rooms 1111 and 1112, 205 La Salle Street.
Elevators on C. M. & St. P. Ry., and C. B. & Q. Ry., Chicago. Total Capacity 9,000,000 Bushels.
J. A. DEMUTH, 40 Elm Street, Oberlin, Ohio. CHICAGO, May 26, 1893.
DEAR SIR:—Yours of the 22d inst in reference to Check Beams in use on our Fairbanks scales. Would say that we have in use 35 of the Check Beams on scales at our elevators, and consider them invaluable for accurate weighing. Yours very truly, ARMOUR ELEVATOR CO.

PADDOCK, HODGE & COMPANY,
GRAIN MERCHANTS.
29 and 30 Produce Exchange.
J. A. DEMUTH & CO., Oberlin, O. TOLEDO, OHIO, June 28, 1893.
DEAR SIR:—In reply to your favor of a recent date: We have had our Fairbanks scales supplied with your double entry system since last November, and in errors detected and corrected, for and against us, it has more than paid for itself, to say nothing of the satisfaction of knowing that our weighman's entries are absolutely correct after they have been balanced up by your system. Yours truly, JAMES HODGE, Secy. and Treas. Toledo Elevator Co.
Dictated by J. H.

Furnished only with Fairbanks Scales

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The Best Feed Grinder on Earth,



AT PRICES THAT
DEFY COMPETITION?

If so, write to

Chas. Kaestner & Co.

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POWER MACHINERY,

CHICAGO, - ILL.

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THE ALBERT DICKINSON CO.

Timothy, Clovers, Flax, Hungarian, Millets, Red Top, Blue Grass,
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OFFICES, COR. CLARK & SIXTEENTH STS., CHICAGO, ILL.

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T. L. RODGERS, Secretary,
Pittsburg, Pa.

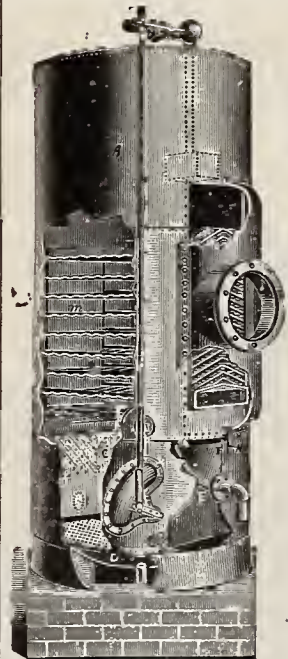
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STILWELL'S PATENT IMPROVED.



Lime Extracting
Heater.
Uses Exhaust
Steam.
Separates the Oil
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Steam and Water.
It Regulates
the Feed.
The Pipes Never
Fouled.
Prevents Scale in
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Removing
all Impurities from
the Water
Before it Enters
the Boiler.

THOROUGHLY
TESTED.

Over 4,500

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DAILY USE.

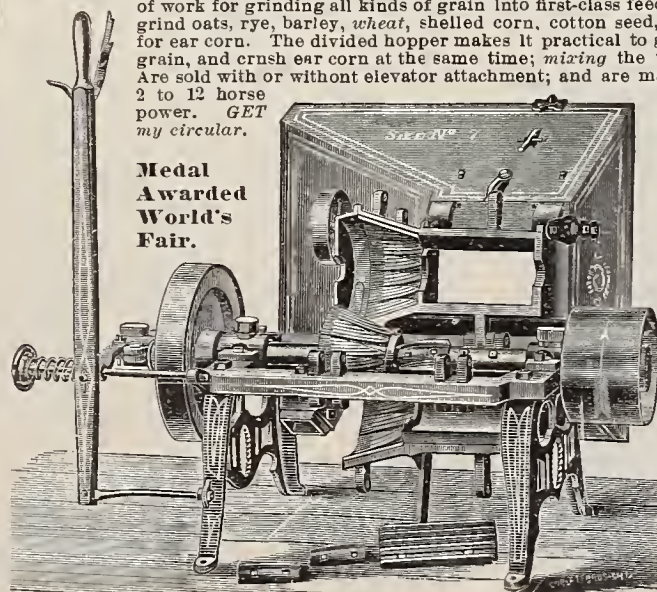
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Free.

The Stilwell-Bierce & Smith-Vaile Co.
DAYTON, OHIO.

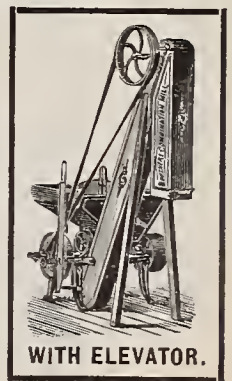
THE BEST ALL-AROUND FEED MILL.

The conical burrs give large capacity with moderate power. Ahead of rolls or burrs in speed and quality of work for grinding all kinds of grain into first-class feed. Will crush corn and cob, and grind oats, rye, barley, wheat, shelled corn, cotton seed, oil cake, etc. Has self-feeder for ear corn. The divided hopper makes it practical to grind oats, wheat, or other small grain, and crush ear corn at the same time; mixing the two in any proportion desired. Are sold with or without elevator attachment; and are made in three sizes, ranging from 2 to 12 horse power. GET my circular.

Medal
Awarded
World's
Fair.

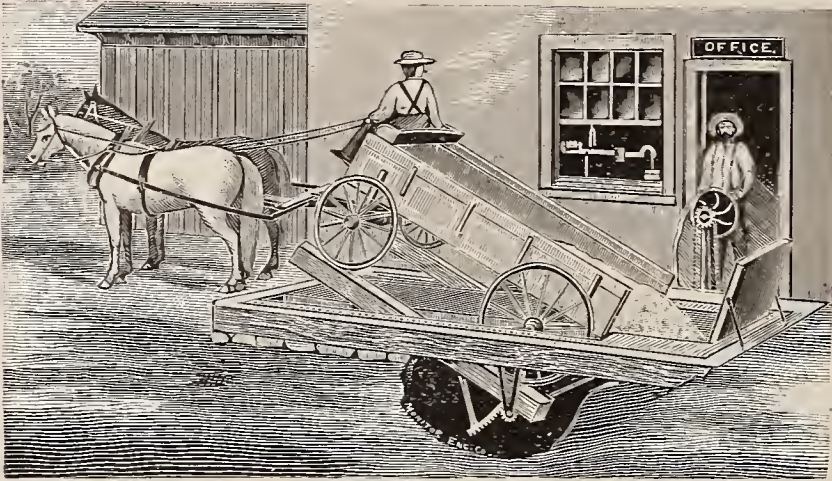


N. P. BOWSER
South Bend, Ind.



WITH ELEVATOR.

Savage & Love's



PATENT WAGON DUMP

The only dump made that is always under the complete control of operator.

MESSRS. SAVAGE & LOVE, Rockford, Ill.

MINNEAPOLIS, MINN., April 28, 1892.

In regard to your Wagon Dump, we will say that we have about twenty of them, which we have had in active service for the past four or five years, and in this time we have had very few breakages, and nothing of any serious nature, which we consider is very good. And taken all round we think them as good, if not the best dump made.

Yours truly,

CARGILL ELEVATOR CO.

MESSRS. SAVAGE & LOVE, Rockford, Ill.

MINNEAPOLIS, MINN., August 9, 1894.

GENTLEMEN:—In answer to yours of August 9, will say that our dumps that we got from you have given us perfect satisfaction. Our buyers all say that it is superior to any dump they have seen. What they claim superior to other dumps is that they can be let part way down or all the way at pleasure. This helps them where they have sacks and large loads of wheat.

Dictated by J. F. Cargill.

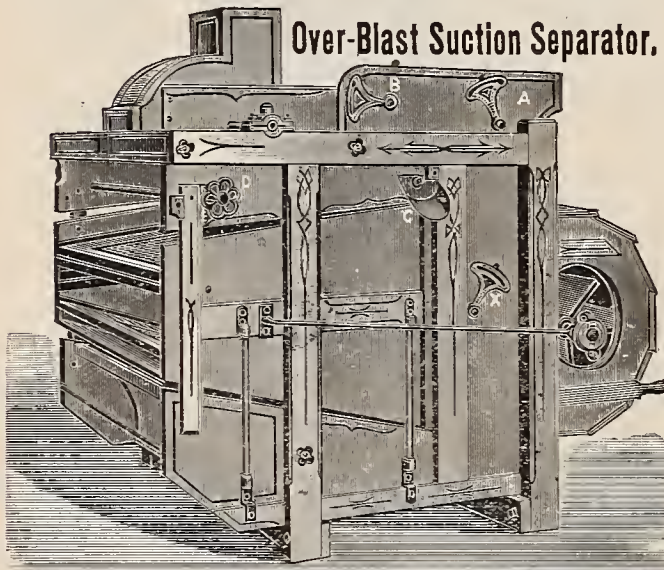
Yours truly,
CARGILL ELEVATOR CO.

Manufactured only by

THE SAVAGE & LOVE CO., Rockford, Ill.

Dealers in Shafting, Pulleys, Hangers, Leather and Rubber Belting and Elevator Supplies.

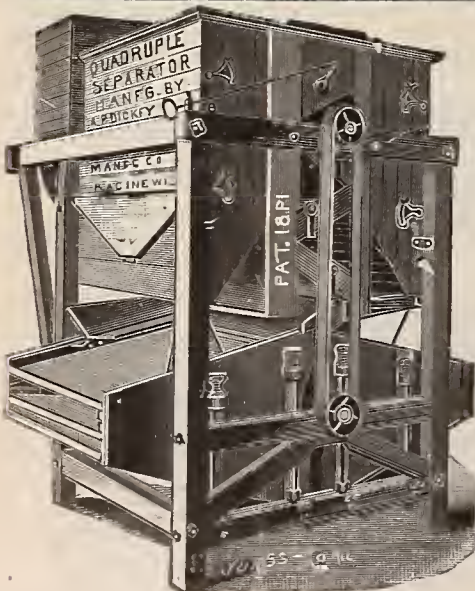
THE CELEBRATED A. P. DICKEY GIANT GRAIN CLEANERS.



THE
STANDARD
IN THEIR
LINE.

"Grain
Cleaned
to a
Standstill."

Manufactured in any desired size and pattern, with capacities to accommodate the largest Elevator and Flouring Mills, or small Warehouses for hand use. Single and Double, End and Side Shake, and Dustless Separators, both Under and Over-Blast.



The Quadruple Suction Dustless Separator. Four separate suction, independent of each other with sieves and screens, requiring less power, less floor space, lower in height, needing less bracing, has better and more perfect separations, and furnished with the only perfect force feed and mixer on the market. Guaranteed to clean Grain to any desired standard without waste once through this machine twice as well as any machine made.

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A. P. Dickey Mfg. Co.

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THE SMITH PNEUMATIC TRANSFER AND STEEL STORAGE SYSTEM.

Now in Successful Operation at Toledo, Ohio.

This is an entirely new and complete system for handling, treating and storing grain, seeds, millstuff, coal, sand, gravel, salt and other subdivided substances which can be handled in bulk, and the protection and preservation of cereals, seeds, vegetables, fruits, ensilage and fodder crops, cotton, wool and other fibers, tobacco, provisions and all perishable substances and valuable commodities in absolute safety from fire, water, air, storms, floods, microbes, insects, vermin, animals, thieves, evaporation, fermentation, oxidation or other causes of damage or destruction.

This system has nothing in common with other methods, but is entirely different and distinct, in construction, arrangement and operation, materials used, principles involved, and results obtained, from all others heretofore in use.

It is fully protected by 20 patents already issued, and others pending, in the United States and principal foreign countries.

It was on exhibition at the World's Columbian Exposition of 1893, and was awarded four highest medals and diplomas and received in addition thereto the highest indorsement of the principal officers of the Exposition as well as of the highest authorities in all industries to which it is applicable.

The title to all patents and other rights belonging to this system is vested in The Smith Pneumatic Transfer & Storage Co., and any infringement thereon will receive prompt attention.

The policy of the Company in regard to the introduction of its system is to make such liberal and easy terms with all who desire to use it that there will be no cause for complaint.

Full particulars furnished on application in person or by letter to

The Smith Pneumatic Transfer & Storage Co.

1327 MANHATTAN BUILDING,

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STEAM DRYER

For Cornmeal, Hominy, Buckwheat, Rice, and all kinds of Cereal Products; also Sand, Coal dust, etc.

Drying Cylinder made entirely of Iron. The machine has few parts and is not liable to get out of order. Automatic in its operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

USED AND RECOMMENDED BY LARGEST AND BEST MILLS.

Automatic Adjustment Mill.

The adjustment is positive and automatic, utilizing every part of the grinding surfaces. Can be started or stopped at pleasure, without stopping the power. Is dressed without taking the shaft out of its boxes, or the belt off the pulley.

Comprises all Recent Improvements for Producing Goods at Lowest Cost.

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ARE THE BEST FOR CONVEYING GRAIN.

The Revere Rubber Belt is now used in many grain elevators and is giving satisfaction in every respect.

IT IS THE BEST AND LEAST EXPENSIVE BELT MADE.

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FOR USE IN
ELEVATORS, DISTILLERIES, MALT HOUSES, FLOUR MILLS, ETC.

ACCURATE AND RELIABLE AT ALL TIMES.

SCALES SENT ON 30 DAYS' TRIAL

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CONVEYING, ELEVATING,
AND
POWER TRANSMITTING
MACHINERY.



CALDWELL STEEL CONVEYOR.

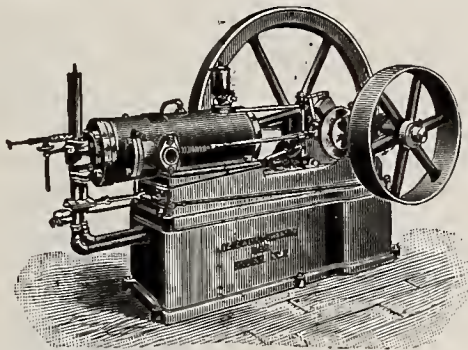
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AUTOMATIC POWER GRAIN
SHOVELS.
SOUTH BEND WOOD SPLIT
PULLEYS.

H. W. CALDWELL & SON COMPANY,

127, 129, 131 and 133 W. Washington St.

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SPROCKET WHEELS, LINK BELTING, ELE
VATOR BOOTS, BOLTS AND BUCKETS,
SHAFTING, BELTING, HANGERS,
PULLEYS, GEARS, CAR
PULLERS, ETC.

EVERY SEAMLESS STEEL
ELEVATOR BUCKETS.



CALDWELL CHARTER GASOLINE AND GAS ENGINES.

2 TO 75 ACTUAL HORSE POWER.

These engines use gasoline from tanks lower than the engines. They are simple, reliable and safe. We build them substantially, of best material, and we know they are the best engines made.

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AMERICAN MILLER.

PUBLISHED BY

MITCHELL BROS. CO., Chicago.

\$2.00 PER YEAR.

EAGLE BRAND THE BEST!

ROOFING

EAGLE BRAND THE BEST!

It is superior to any other roofing and unequalled for House, Barn, Factory or outbuildings; it costs half the price of shingles, tin or iron; it is ready for use and easily applied by anyone; it is the best roofing in the market, in durability, to all others. Send for estimate and state size of roofing.

SEND FOR SAMPLES. **RUBBER PAINT** NO TAR USED.

The best known paint in the world for tin, iron or shingle roofs, fences, sides of barns and outbuildings; it costs only 60 cents per gallon in barrel lots, or \$4.50 for a 5-gallon tub. Color, dark red. It will stop leaks in tin or iron roofs that will last for years. It is guaranteed not to peel, crack, scale nor wash off, and is fire-proof against sparks. **TRY IT.**

EXCELSIOR PAINT AND ROOFING CO.,

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THE AMERICAN ELEVATOR AND
GRAIN TRADE,

\$1.00 PER YEAR.

Monthly.

THE HAY TRADE JOURNAL AND
DIRECTORY,

\$2.00 PER YEAR.

Weekly.

BOTH FOR \$2.00.

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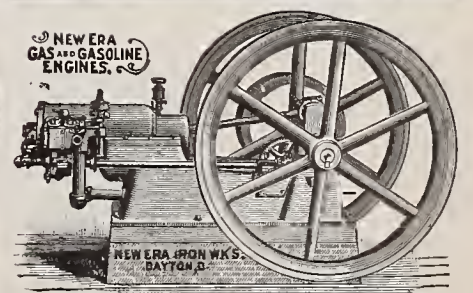
The Hay Trade Journal, OR
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Steel Cable and Special Chains
—FOR—
**ELEVATING
AND CONVEYING
MACHINERY**
FOR HANDLING MATERIAL OF ALL KINDS
**POWER TRANSMISSION
MACHINERY.**
SHAFTING,
PULLEYS,
HANGERS,
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**WIRE CABLE
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For long and short
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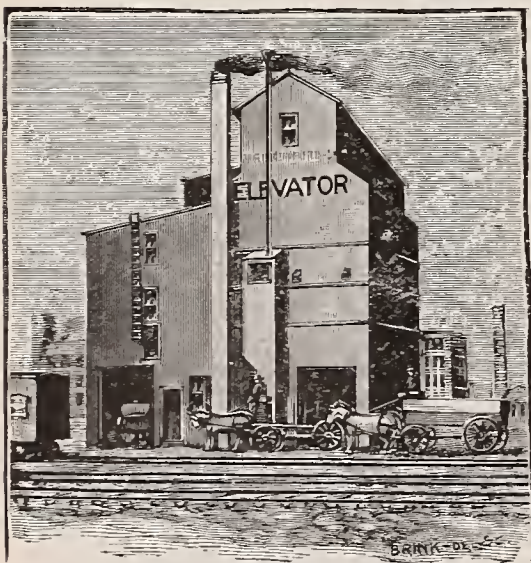
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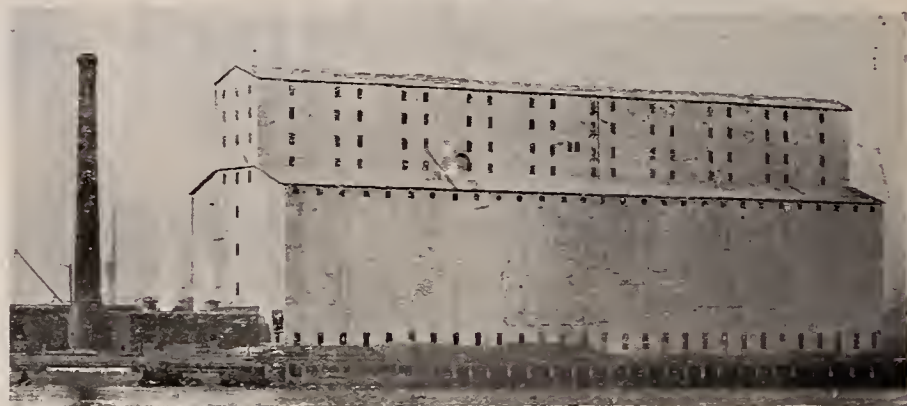


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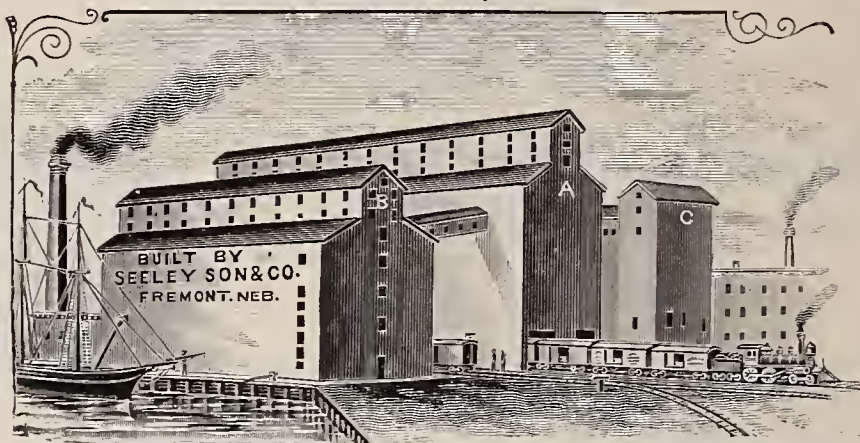
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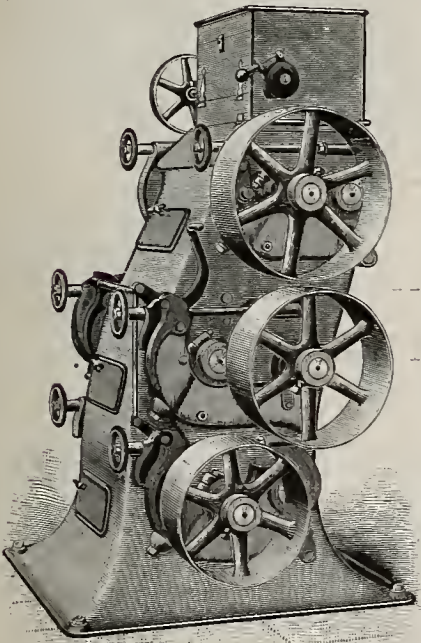
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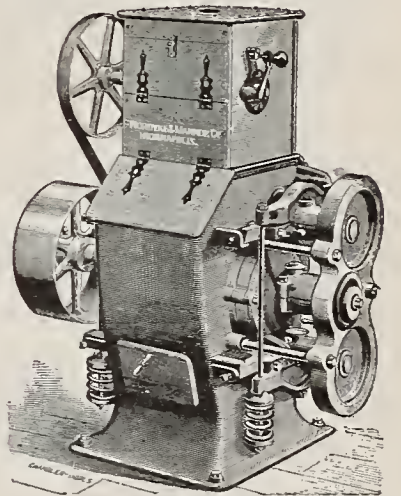


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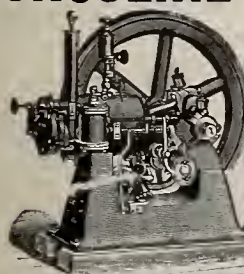
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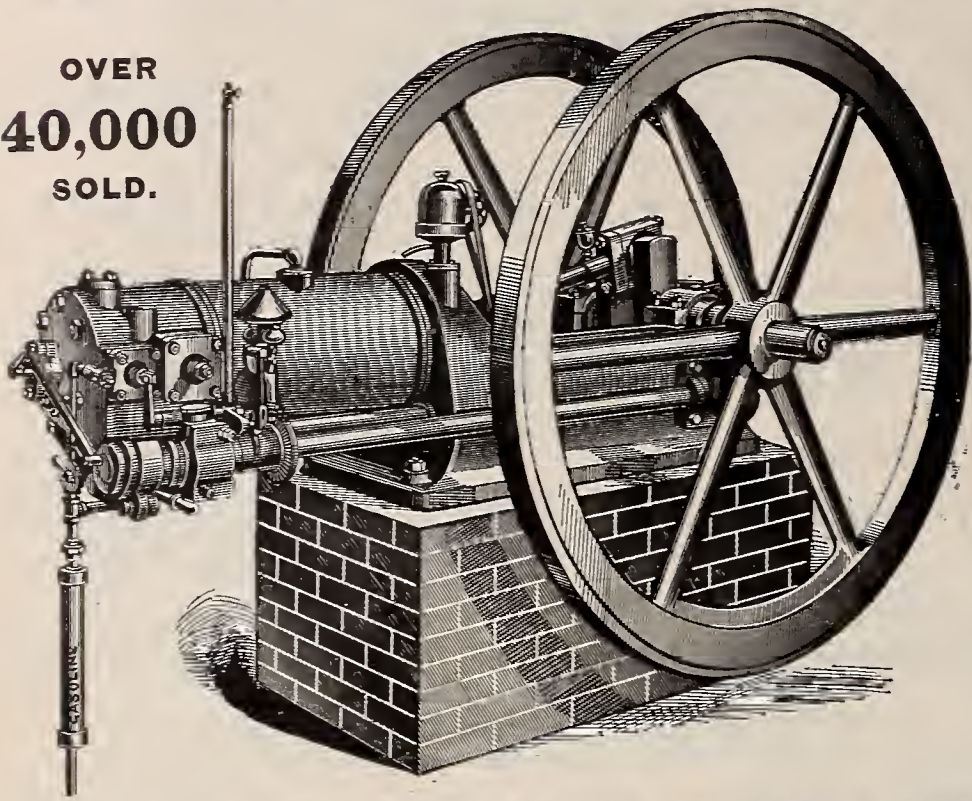
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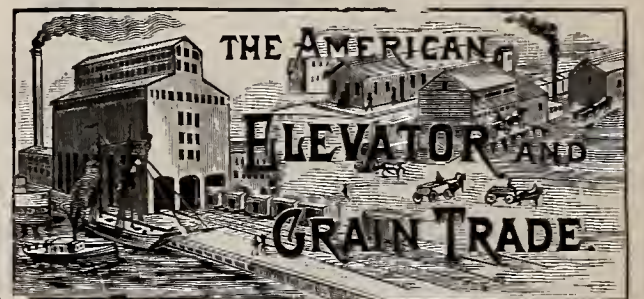
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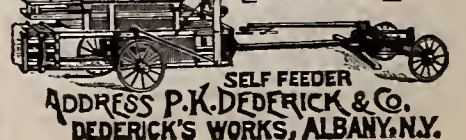
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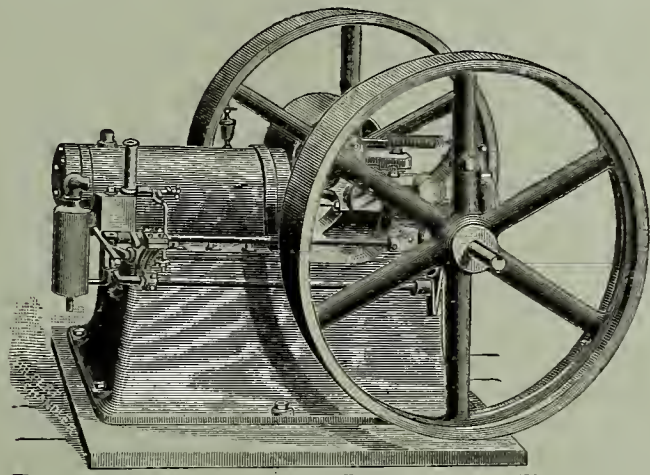
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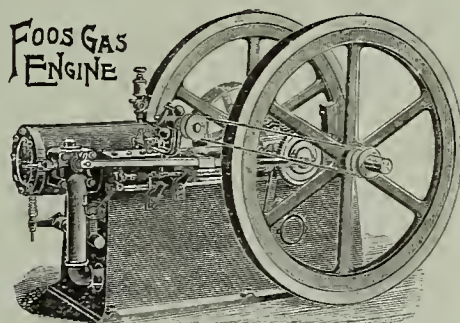
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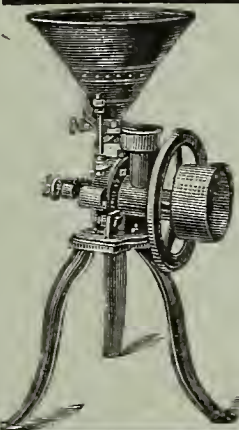


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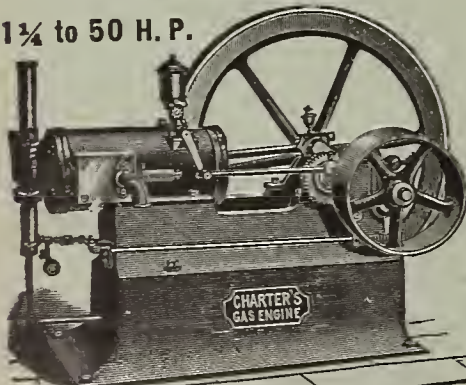
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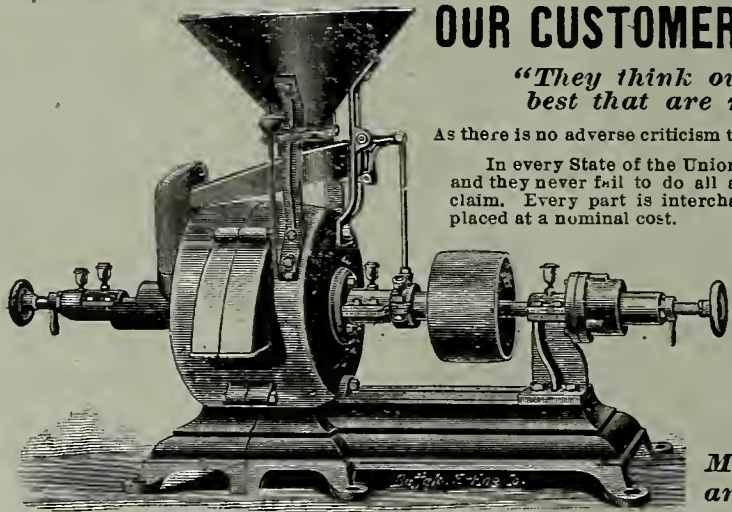
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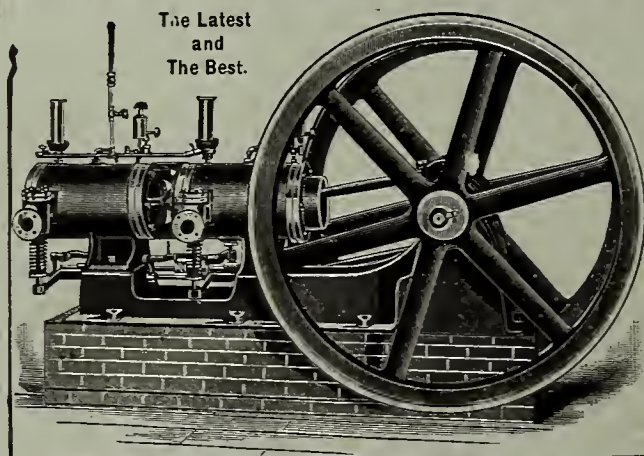
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